Waitemata
District Health Board

Best Care for Everyone

BOARD MEETING

Wednesday 04th November 2015

1.30pm

AGENDA

Items to be considered in public meeting

VENUE

Waitemata DHB Boardroom
Level 1, 15 Shea Terrace
Takapuna

Karakia

E te Kaihanga e te Wahingaro

E mihi ana mo te ha o to koutou oranga

Kia kotahi ai o matou whakaaro i roto i te tu waatea.

Kia U ai matou ki te pono me te tika

I runga i to ingoa tapu

Kia haumie kia huie Taiki eee.

Creator and Spirit of life.

To the ancient realms of the Creator

Thank you for the life we each breathe to help us be of one mind
As we seek to be of service to those in need.
Give us the courage to do what is right and help us to always be aware
Of the need to be fair and transparent in all we do.

We ask this in the name of Creation and the Living Earth.

Well Being to All.

MEETING OF THE BOARD – 04th November2015

Venue: Waitemata DHB Boardroom, Level 1, 15 Shea Tce, Takapuna Time: 1.30 pm

WDHB BOARD MEMBERS	WDHB MANAGEMENT
Lester Levy - Chair	Dale Bramley - Chief Executive Officer
Max Abbott - WDHB Board Member	Robert Paine - Chief Financial Officer and Head of Corporate Services
Sandra Coney - WDHB Board Member	Andrew Brant - Chief Medical Officer
Warren Flaunty - WDHB Board Member	Simon Bowen - Director Health Outcomes
James Le Fevre - WDHB Board Member	Debbie Holdsworth - Director Funding
Tony Norman - WDHB Deputy Chair	Jocelyn Peach - Director of Nursing and Midwifery
Morris Pita - WDHB Board Member	Cath Cronin – Director of Hospital Services
Christine Rankin - WDHB Board Member	Jenny Parr – Acting Director of Allied Health
Allison Roe - WDHB Board Member	Fiona McCarthy – Director Human Resources
Gwen Tepania-Palmer - WDHB Board Member	Paul Garbett - Board Secretary

APOLOGIES: Warren Flaunty

REGISTER OF INTERESTS

- Does any member have an interest they have not previously disclosed?
- Does any member have an interest that may give rise to a conflict of interest with a matter on the agenda?

PART 1 – Items to be considered in public meeting

AGENDA

TIME:

1.30pm *(please note agenda item times are estimates only)*

1. AGENDA ORDER AND TIMING

2. BOARD MINUTES

1.30p.m 2.1 Confirmation of Minutes of the Meeting of the Board (23/09/15) 6
Actions arising from previous meetings 17

1.35pm **3. CHAIR'S REPORT** ..... (Verbal Report)

4. EXECUTIVE REPORTS

1.40pm 4.1 CEO's Report 18
1.50pm 4.2 Health and Safety Report 39
2.00pm 4.3 Communications Report 59

5. DECISION PAPERS

2.05pm 5.1 Ethnicity Data Audit Toolkit 65
2.15pm 5.2 Health Services Plan 73

6. PERFORMANCE REPORT

2.35pm 6.1 Financial Performance 246

7. COMMITTEE REPORTS

2.45pm 7.1 Hospital Advisory Committee Meeting (23/09/15) 260
7.2 Auckland and Waitemata DHBs' Community and Public Health Advisory Committees Meeting (14/10/15) 270

8. INFORMATION PAPERS

2.50pm 8.1 Capital Investment Committee Update – Mason Clinic 15 Bed Unit Bed Proposal 280

2.55pm **9. RESOLUTION TO EXCLUDE THE PUBLIC** 281

Waitemata District Health Board

Board Member Attendance Schedule 2015

NAME	FEB	APRIL	MAY	JULY	AUG	SEPT	NOV	DEC
Dr Lester Levy (Chair)	✓	✓	✓	✓	✓	✓		
Max Abbott	✓	×	✓	✓	✓	✓		
Sandra Coney	×	✓	✓	✓	×	✓		
Warren Flaunty	✓	×	✓	✓	✓	✓		
James Le Fevre	✓	✓	✓	✓	✓	×		
Anthony Norman (Deputy Chair)	✓	✓	✓	✓	✓	✓		
Morris Pita	×	✓	✓	✓	✓	✓		
Christine Rankin	✓	✓	✓	✓	✓	✓		
Allison Roe	✓	✓	✓	✓	×	✓		
Gwen Tepania-Palmer	✓	✓	✓	✓	✓	✓		

× Apologies given
****Attended part of the meeting only***
 # Absent on Board business
^ Leave of Absence

REGISTER OF INTERESTS

Board/Committee Member	Involvements with other organisations	Last Updated
Lester Levy - **Board Chairman**	Chair – Auckland District Health Board Chairman – Auckland Transport Independent Chairman – Tonkin & Taylor Chief Executive – New Zealand Leadership Institute Professor of Leadership – University of Auckland Business School Trustee - Well Foundation (ex-officio member) Member - State Services Commission's Performance Improvement Framework Review Panel	11/09/15
Max Abbott	Pro Vice-Chancellor (North Shore) and Dean – Faculty of Health and Environmental Sciences, Auckland University of Technology Patron – Raeburn House Advisor – Health Workforce New Zealand Board Member, AUT Millennium Ownership Trust Chair – Social Services Online Trust Board member – Rotary National Science and Technology Forum Trust	19/03/14
Sandra Coney	Chair – Waitakere Ranges Local Board, Auckland Council	12/12/13
Warren Flaunty	Member – Henderson - Massey and Rodney Local Boards, Auckland Council Trustee (Vice President) - Waitakere Licensing Trust Shareholder - EBOS Group Shareholder – Green Cross Health Director – Westgate Pharmacy Ltd Chair – Three Harbours Health Foundation Director - Trusts Community Foundation Ltd	26/11/14
James Le Fevre	Emergency Physician – Auckland Adults Emergency Department Pre-hospital Physician – Auckland HEMS – ARHT/Auckland DHB Co-opted Member – Whanganui District Health Board Hospital Advisory Committee Trustee – Three Harbours Foundation Member – Association of Salaried Medical Specialists Shareholder – Pacific Edge Ltd James' wife is an employee of the Waitemata DHB, Department of Anaesthesia and Perioperative Medicine	12/08/15
Anthony Norman – Deputy Board Chairman	Board Chair - Northland DHB Director - Health Alliance NZ Ltd Director - Health Alliance (FPSC) Ltd Trustee and Treasurer - Kerikeri International Piano Competition Trust Partner - Mill Bay Haven, Mangonui (accommodation provider)	05/11/14
Morris Pita	Board Member – Auckland District Health Board Owner/operator – Shea Pita and Associates Limited Shareholder – Turuki Pharmacy Limited Wife is member of the Northland District Health Board	13/12/13
Christine Rankin	Member - Upper Harbour Local Board, Auckland Council Director - The Transformational Leadership Company	15/07/15
Allison Roe	Member – Devonport-Takapuna Local Board, Auckland Council Chairperson – Matakana Coast Trail Trust	02/07/14
Gwen Tepania-Palmer	Chairperson- Ngatihine Health Trust, Bay of Islands Life Member – National Council Maori Nurses Alumni – Massey University MBA Director – Manaia Health PHO, Whangarei Board Member – Auckland District Health Board Committee Member – Lottery Northland Community Committee	10/04/13

2.1 Confirmation of Minutes of the Board meeting held on 23rd September 2015

Recommendation:

That the Minutes of the Board meeting held on 23rd September 2015 be approved.

Minutes of the meeting of the Waitemata District Health Board

Wednesday 23 September 2015

held at Waitemata DHB, Boardroom, Level 1, 15 Shea Terrace,
Takapuna, commencing at 1.46p.m

PART I – Items considered in public meeting

BOARD MEMBERS PRESENT:

Lester Levy (Board Chair)
Max Abbott
Sandra Coney
Warren Flaunty
Tony Norman (Deputy Board Chair)
Morris Pita
Christine Rankin
Allison Roe
Gwen Tepania-Palmer

ALSO PRESENT: Dale Bramley (Chief Executive Officer)
Robert Paine (Chief Financial Officer and Head of Corporate Services)
Andrew Brant (Chief Medical Officer)
Debbie Holdsworth (Director Funding)
Simon Bowen (Director of Health Outcomes)
Fiona McCarthy (Director Human Resources)
Jocelyn Peach (Director of Nursing and Midwifery)
Peta Molloy (Acting Board Secretary)
(Staff members who attended for a particular item are named at the start of the minute for that item)

PUBLIC AND MEDIA REPRESENTATIVES:

Lynda Williams (Auckland Womens Health Council)
Joanna Broad (University of Auckland)
Annabelle Claridge (University of Auckland)

APOLOGIES: An apology was received from James Le Fevre and apologies for early departure from Tony Norman and Max Abbott.

WELCOME The Board Chair welcomed those present.

DISCLOSURE OF INTERESTS

There were no additions or amendments to the Interests Register.

There were no declarations of interest relating to the open section of the agenda.

1 AGENDA ORDER AND TIMING

Items on the open agenda were taken in the same order as listed in the agenda.

2 BOARD MINUTES

2.1 Confirmation of Minutes of the Meeting of the Board held on 12th August 2015 (agenda pages 6-18)

Resolution (Moved Gwen Tepania-Palmer/Seconded Tony Norman)

That the minutes of the Board meeting held on 12th August 2015 be approved.

Carried

Actions arising from previous meetings (agenda page 19)

No issues were raised.

3 CHAIR'S REPORT

No update.

4 EXECUTIVE REPORTS

4.1 Chief Executive's Report (agenda pages 20-39)

The Chief Executive introduced the report. Matters that he highlighted or updated included:

- That the Health and Disability Commissioner has released the latest national complaint report. It was noted that Waitemata DHB has the lowest rate nationally. The ongoing work that services are doing to address complaints was acknowledged.
- That the Waitemata DHB has for the second year running achieved enviro-mark Gold certification.
- That the national standardised hospital mortality rates are to be issued on 24th September, it was noted that Waitemata DHB has the lowest rate nationally.
- That the dedicated women's ward for gynaecology patients is scheduled to be officially opened on Friday 6th November between 2pm and 3pm. A formal invitation will be sent to Board members.
- That the level 3 podium is scheduled to be officially opened on Monday 1st December. A formal invitation will be sent to Board members.
- The sad passing of George Gair was noted with some members of the Board expressing their fond memories of Mr Gair.
- That a positive attendance level was noted at the CEO lecture series address by the Minister of Health. It was also noted that an invitation had been extended to the Prime Minister to speak at a CEO lecture series event in 2016, if confirmed Board members would be advised of the date.
- That the Waitemata DHB monthly performance scorecard in the Chief Executive report had been updated with outcome measures being added and the ability to track how major capital projects are progressing. The updated scorecard was positively received by the Board.

Matters covered in discussion and response to questions included:

- Gwen Tepania-Palmer acknowledged the reflective and comprehensive update report and in particular the work of the Chief Executive and the leadership that he brings to the organisation.

The report was received.

4.2 Health and Safety Performance Report (agenda pages 40-53)

Fiona McCarthy (Director Human Resources) and Margaret Kamphuis (Manager, Occupational Health and Safety Service) were present for this item. Fiona McCarthy highlighted:

- That in response to the action point on the Health and Safety Reform Bill, it was noted that the Act does not apply to volunteers and that all other director roles are included in the definition of an 'officer'.
- That with regard to the graphs in the report (pages 48 to 50) and the reference about accident types, a more in depth analysis is to be undertaken to better identify each outcome/category.

Matters covered in discussion and response to questions included:

- It was noted that management need to be engaged with health and safety in the workplace as what those in positional authority are prepared to walk past will become the standard that people aspire to. Awareness of health and safety requires vigilance and alertness, any trend that looks concerning needs to be investigated. Fiona McCarthy noted the 'Don't Walk Past' programme that is in place.
- The 'Waitemata Health and Safety System' (Safe Way of Working – page 40 of the agenda) was noted and it was requested that further detail on the 14 elements noted in the report be provided to the Board.
- The loading bay work at North Shore Hospital has been completed. Some additional work is being done to install hand rails and to erect an extra canopy.
- The Board Chair acknowledged the overall work being done and that there had been some good development in the health and safety area; emphasis now needs to be placed on areas where it was not yet forefront.
- In response to a question, it was noted that reporting will move to providing feedback on changes required in 'hot spots', rather than just reporting figures.

The report was received.

4.3 Communications (agenda pages 54-60)

Dominique Crikemans (Senior Advisor, Internal Communications) was present for this time. An apology was received from Matthew Rogers (Senior Advisor, External Affairs).

On behalf of Matthew Rogers, the Chief Executive summarised the external media coverage, noting that:

- External media coverage was favourable for the month.
- There have been a very high number of official information act requests received. The volume received has overwhelmed the ability to respond within the required timeframes and additional resource will now be provided to assist. On three recent occasions, due to the size of the requests, it was deemed necessary to apply a charge for the requests and subsequently the requests were not pursued. It was also noted that Matthew Rogers recently attended a meeting held with the Ombudsman, from which helpful advice on the processing of official information act requests was received.

With regard to internal communications, Dominique Crikemans highlighted the following:

- People are responding well to the patient centric design of the new website, there is an on-going upward trend with visitors to the site.
- The Karaka Street office space is almost complete and the staff relocating are looking forward to the move.
- Planning for staff activities over the Christmas period is underway.

Matters covered in discussion and response to questions included:

- The potential cost involved with responding to the high volume of official information act requests along with the substantial time commitment for the Senior Advisor, External Affairs was reiterated. It was noted that all DHBs are experiencing similar volumes of official information act requests.

The report was received.

5 DECISION PAPERS

5.1 Kaumatua Action Plan for Auckland and Waitemata District Health Boards (agenda pages 61-87)

Debbie Holdsworth (Director Funding) and Karl Snowden (Programme Manager, Maori Health Gain) were present for this time. An apology was received from Aroha Haggie (Manger, Maori Health Gain) who was at an Indigenous Symposium at Ko Awatea. The following matters were highlighted:

- That the Kaumatua Action Plan for Auckland and Waitemata DHBs has been endorsed by the Manawa Ora Committee.
- The Plan has been prepared in partnership with the DHB's MoU partners.
- The Plan was endorsed by the Auckland District Health Board at its meeting on 16th September 2015.

Resolution (Moved Gwen Tepania-Palmer/Seconded Max Abbott)

That the Board endorse the final draft Kaumatua Action Plan for Auckland and Waitemata District Health Boards.

Carried

5.2 Incentives-based Smoking Cessation in Pregnancy Programme (agenda page 88-91)

Debbie Holdsworth (Director Funding) introduced the report. She noted that since the time of writing healthAlliance had identified a potential issue with tax and the use of vouchers and that Amanda Mark (Legal Manager) was seeking advice on this matter. In response to this the Board agreed that the resolution is subject to a satisfactory resolution on the issue of tax and the use of vouchers, confirmation of this resolution was delegated to the Chief Executive and Director of Funding.

Sandra Coney expressed concern at the type of vouchers that may be given and that rather than petrol vouchers they should perhaps be for baby products or groceries, she noted that it was important that the DHB is sensible and not legitimising behaviours the DHB is

otherwise trying to discourage. This point was acknowledged and it was noted that petrol vouchers can be required and utilised to seek medical assistance.

Resolution (Moved Max Abbott/Seconded Gwen Tepania-Palmer)

That the Board:

1. **Notes that legal advice is being sought to clarify any possible tax issues from the use of vouchers and delegates to the Chief Executive Officer and the Director of Funding the authority to agree to a satisfactory resolution on this matter.**

2. **Subject to a satisfactory resolution of point 1 above, the Board:**

    a) **Endorses the proposal for an incentives-based smoking cessation in pregnancy programme.**

    b) **Approves funding of $95,618 for Waitemata DHB from the Ministry of Health Tobacco Control funding underspend to pilot the programme.**

    c) **Notes that the programme pilot includes provision for an external evaluation.**

Carried

6 PERFORMANCE REPORTS

6.1 Financial Performance (agenda pages 92-106)

Robert Paine (Chief Financial Officer) introduced the report.

In response to a question it was noted that with regard to the Nursing MECA that it has been ratified and that it is to be backdated, this has been accrued.

Resolution (Moved Morris Pita/Seconded Tony Norman)

That the following performance reports for the month and attachments be received:

1 **Financial Performance - DHB Consolidated**
2 **Financial Performance - DHB Arms**
3 **Financial Performance - Other Indicators / Trends**
4 **Capital Expenditure**
5 **Financial Position**
6 **Cashflow Position**
7 **Treasury**

Carried

7 COMMITTEE REPORTS (agenda pages 107-127)

7.1 Hospital Advisory Committee Meeting held on 12th August 2015

Resolution (Moved Gwen Tepania-Palmer/Seconded Warren Flaunty)

That the draft minutes of the Hospital Advisory Committee Meeting held on 12th August 2015 be received.

Carried

7.2 Auckland and Waitemata DHBs' Community and Public Health Advisory Committees Meeting held on 02nd September 2015

Resolution (Moved Gwen Tepania-Palmer/Seconded Tony Norman)

That the draft minutes of the Auckland and Waitemata DHBs' Community and Public Health Advisory Committees meeting held on 02nd September 2015 be received.

Carried

8 INFORMATION PAPERS

8.1 Internal Communications Survey (agenda page 128-129)

Fiona McCarthy (Director, Human Resources) introduced the paper and noted that:

- A positive response was received with over 200 staff completing the survey.
- While there was a good response rate, there were some groups where there was not a high response rate and the information learnt from the survey response rate can be applied next time.
- It was pleasing to note that staff had a good knowledge of the DHB's values, purpose and Board priorities.
- Feedback was received on the current channels used to gain information (website, email and the like) and which of those channels are preferred.
- The team is meeting to discuss the survey results further and to progress some of the recommendations.

The report was received.

8.2 Waitemata DHB and Auckland DHB 2015/16 Maori Health Plans (agenda page 130-134)

Debbie Holdsworth (Director Funding) introduced the paper and noted that it had been submitted to the Community and Public Health Advisory Committee and covers the Maori Health Plan highlights for the 2014/15 year and details the new areas of activities for 2015/16.

The report was received.

8.3 Waitemata District Health Board – Future Bed Requirements 2026 (agenda page 135-174)

The Chief Executive introduced the report noting that Dr Ratana Walker (Senior Advisor) had been contracted to prepare the report. The following points were noted and matters covered in discussion included:

- A bed model is required to estimate future bed needs, the model is based on current demographic patterns.
- In response to a question about the projected bed needs for the Elective Surgery Centre, it was noted that the Elective Surgery Centre had been built explicitly with additional capacity.
- In response to a question about the capacity for acute beds, it was noted that 37 are operating and that there is capacity for 46.
- With regards to age related care and projected bed needs, it was noted that Peter Sandiford (Clinical Director, Health Gain) had produced a paper showing that the incidence of age related dementia was decreasing.
- With regards to same-sex rooms, it was noted that the general view of the DHB was to have same-sex rooms, although this is not always possible over the winter months. With new builds and refurbishments, the intention is to move away from four-bedded rooms, a report will be provided to the Board about the ideal future ward design.

The report was received.

9 RESOLUTION TO EXCLUDE THE PUBLIC (agenda pages 175-178)

Resolution (Moved Gwen Tepania-Palmer/Seconded Warren Flaunty)

That, in accordance with the provisions of Schedule 3, Sections 32 and 33, of the NZ Public Health and Disability Act 2000:

The public now be excluded from the meeting for consideration of the following items, for the reasons and grounds set out below:

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
1. Minutes of the Meeting of the Board with Public Excluded 12/08/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Confirmation of Minutes** As per the resolution(s) from the open section of the minutes of the above meeting, in terms of the NZPH&D Act.
2. Minutes of the Hospital Advisory Committee with Public Excluded 12/08/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982.	**Confirmation of Minutes** As per the resolution(s) from the open section of the minutes of the above meeting, in terms of the NZPH&D Act.

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
	[NZPH&D Act 2000 Schedule 3, S.32 (a)]	
3. Recommendations of the Audit and Finance Committee with Public Excluded 02/09/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]
4. NEHR	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)] **Legal Professional Privilege** The disclosure of information would not be in the public interest because of the greater need to maintain legal professional privilege. [Official Information Act 1982 S.9 (2) (h)]

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
5. Procurement Update	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Prevent Improper Gain** The disclosure of information would not be in the public interest because of the greater need to prevent the disclosure or use of official information for improper gain or advantage. [Official Information Act 1982 S.9 (2) (k)]
6. Human Resources	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]
7. Term Deposits	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)]
8. Variation to Deed of Lease	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
9. Rent Review	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]
10. Health Services Plan	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Obligation of Confidence** The disclosure of information would not be in the public interest because of the greater need to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment where the making available of the information would be likely to; (i) prejudice the supply of similar information, or information from the same source, and where it is in the public interest that such information should continue to be supplied; or (ii) otherwise damage the public interest. [Official Information Act 1982 S.9 (2) (ba)]

Carried

The meeting in open session concluded at 2.43 p.m.

SIGNED AS A CORRECT RECORD OF THE MEETING OF THE WAITEMATA DISTRICT HEALTH BOARD - BOARD MEETING HELD ON 23 SEPTEMBER 2015

_____CHAIR

Actions Arising and Carried Forward from Previous Board Meetings as at 27th October 2015

Meeting Date	Agenda Ref	Topic	Person Responsible	Expected Report back	Comment
23/09/15	4.2	Health and Safety Performance Report Further detail to be provided on the 14 elements of the 'Waitemata Health and Safety System'.	Fiona McCarthy	Board 04/11/15	Included in the Health and Safety Report – section 8.

4.1 Chief Executive's Report

Recommendation:

That the Chief Executive's Report be received.

Prepared by: Dr Dale Bramley, Chief Executive Officer

1. News and events summary

A number of events of significance took place across the DHB over the past six weeks:

- Recent independent reports reflect Waitemata DHB's position as a national leader in a number of key quality and safety measures. Data released by the Health Quality and Safety Commission (HQSC) showed the DHB performed assessments for the risk of falling on 100 per cent of our older patients. Individualised care plans were then developed for 97 per cent of those patients found to be at-risk of falling. The DHB also recorded 98 per cent compliance with use of the surgical safety checklist and adhered to processes for the reduction of surgical site infections on more than 96 per cent of occasions. It followed the release of data demonstrating that Waitemata has the lowest hospital standardised mortality ratio of all 20 DHBs. Together, this feedback demonstrates that our ongoing focus on quality and safety is benefiting our patients. Our challenge is to build on these achievements and keep pushing ahead with further quality improvements that continue making the healthcare journey better and safer for those in our care. View the full Quality and Safety Marker results here:

http://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/projects/quality-and-safety-markers/qsms-april-june-2015/

http://www.waitematadhb.govt.nz/Portals/0/Documents/News/MediaReleases/2015/MediaReleaseMultipleNewReportsShowWaitemataLeadingInQualityAndSafetySeptember2015.pdf

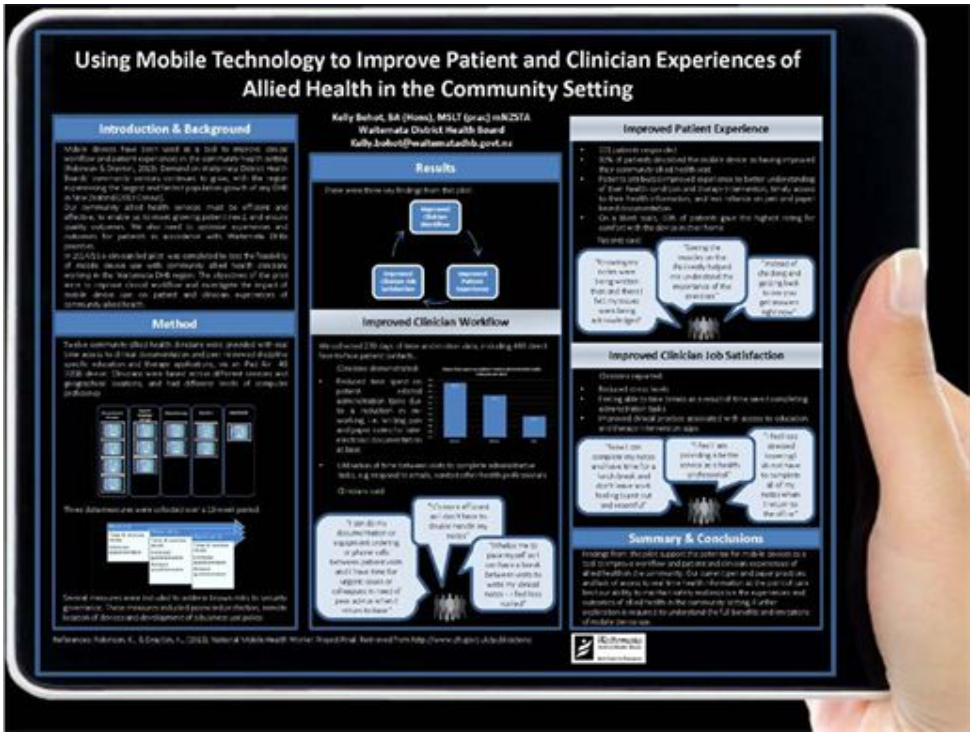
- Waitemata DHB's commitment to giving our community a chance to have a voice in the development of services has been recognised in Waitakere Health Link's October newsletter. One of our consumer representatives, Judith Lunny, has produced an article reflecting on the Waitemata approach to community advocacy following her recent participation in a national conference where she was the only consumer representative attending. "Waitemata DHB should be very proud of the work it does in this area as at present it is leading the field," Judith wrote.

  See attachment one.

- A new front-of-house location has been unveiled for our volunteers to sell their knitted goods and craft items from at Waitakere Hospital. The volunteers will continue to provide their valued community service from a custom-made cabinet near the main entrance of the hospital foyer.

L-R: Waitakere Hospital volunteers Marlene Sutcliffe, Jackie Reed, Elva Colgan and Pamela Johnson.

- Waitemata DHB celebrated success at the Health Informatics New Zealand Awards on 20 October, with speech language therapist Kelly Bohot winning the Best Poster category for her work on using mobile devices to improve patient and clinician experiences of allied health. The poster was based on a Waitemata pilot study involving 12 community allied health clinicians having live access to clinical documentation and peer-reviewed education and therapy applications via a mobile device. Data was gathered at points across a 19-week period, with the clinicians completing a questionnaire and 101 patients who experienced mobile device use in their home providing feedback by interview. Key findings included improved clinician workflow, increased job satisfaction and improved patient experience. The ability to complete documentation tasks 'live' in the community was found to result in an average time saving of 26 minutes per clinician per day. Ninety-three per cent of patients felt that having a mobile device used as part of their intervention improved the patient experience. This work aligns strongly with our organisational values, particularly 'better, best, brilliant' and 'connected' and demonstrates the potential for mobile devices to not only improve workflow but to improve patient and clinician experiences within allied health. Kelly has worked for Waitemata DHB since 2009 and her interest in quality improvement and change management has recently seen her seconded to the Quality Improvement Fellow role, with a focus on quality across our allied health, technical and scientific groups.



The winning poster entry

- On October 9, a workshop was held at Waitakere Hospital giving pregnant Maori women the opportunity to weave their own wahakura (baby bassinette) from flax harvested on the hospital site. The session was led by our maternity team to promote safe sleep practices for babies. The wahakura is considered a safe infant sleeping device and the workshop aimed to reduce the likelihood of bed-sharing with newborns. In addition to being taught the art of weaving a wahakura, women were given information about breastfeeding and the importance of being smokefree in pregnancy to reduce the risk of sudden unexpected death in infancy (SUDI). TVNZ's Te Karere news service attended the session and their report can be viewed via the following link: https://www.youtube.com/watch?v=LSnvGaPdPbM

Expectant mother-to-be Riripeti Hunia, left, with master weaver Cassandra Moar at Te Wai Takere Oranga Marae, Waitakere Hospital.

- *Creating a culture of appreciation*

  A further 50 staff have been recognised in the CEO Awards, launched in mid-2014 to celebrate those staff, nominated by their colleagues and patients, who demonstrate our organisational values through their work. Each staff member whose nomination is considered worthy of acknowledgement receives a personalised letter of thanks, a certificate of appreciation and a small gift. Staff acknowledged with a CEO Award since the last Board meeting were:

  - Lewis Ball, general medical registrar – nominated by Alex Chapman
  - Diana McGregor, Maori CNS gerontology – nominated by Jenny Wright
  - Nikki Cole, Cancer MDM and data coordinator – nominated by Sandra Sheene
  - Vicky Totua, CADS detox team – nominated by Astrid Smith and Sam Brens
  - Beverly Hopper, OPIVA nurse specialist – nominated by Susan Johnston
  - Nikola Ncube, respiratory nurse specialist – nominated by Anne Turner
  - Leigh Edwards, CPR Educator – nominated by Anne Turner
  - Sally Osterman, registered nurse theatres – nominated by Pamela Hawkins
  - Kirstine Williamson, phlebotomist – nominated by Annette Bissett
  - Dr Leslie Harding, house officer medicine – nominated by Dr Paul Muir
  - Dr Min-Jee Kim, house officer medicine – nominated by Dr Paul Muir
  - Wendy Lee Mace, registered nurse Ward 5 – nominated by Tracy Wells
  - Lisa Jones, corporate support manager, Mental Health Services – nominated by MOKO team
  - Debra Redpath, administrator, Patient Service Centre – nominated by Jackie Turner
  - Brent Percy, clinical engineering – nominated by Jon Perrett, Anne-Marie Marsh and Karen Boyle
  - Kat Chaffee, registered nurse, SCBU Waitakere Hospital – nominated by Vicki Savage
  - Penny Torrence, district nurse liaison Ward 4 and 8 – nominated by Natalie Bryce
  - Olivia Bruce, needs assessor – nominated by Rochelle Ward
  - Paula Emery – administration officer, psych liaison – nominated by Meg Beswick
  - Marjorie Sands, charge nurse manager, Outpatients NSH – nominated by Natasha Coleman
  - Asena Lameko, admin officer, CADS Central – nominated by Sharna Sutherland
  - Debbie Blackburn, team leader admin, SAS Office – nominated by Judith Newton
  - Trixina Smith, needs assessor NASC – nominated by Margrete Bullock
  - Beryl Linton, team leader Dental Service – nominated by Yumna Van Niekerk
  - Russel Hanson, community mental health nurse, Mason Clinic – nominated by Paul Huggins
  - Robby Trombin, health care assistant, Emergency Department NSH – Nominated by Beth O'Neill
  - Sharyn Moake, administration officer, Radiology – nominated by Kylie Develing
  - Michelle Davids, cleaner – nominated by Peter Groom
  - Anna Brown, clinical nurse specialist GI/HPB – nominated by Natalie Bryce
  - Veronica Austin, receptionist Mental Health Service for Older Adults – nominated by Meg Beswick
  - Michelle Coutinho, clinical psychologist, Mason Clinic – nominated by Anne Huddleston
  - Debbie Daniel, charge nurse SCBU – nominated by Nixy Paulson
  - Steve Milburn, administrator, He Puna Waiora – nominated by Meg Beswick
  - Patrick Hinchey, North Shore 2 Community Mental Health Team - nominated by Vincent Valdez

- Euna Go, registered nurse, Ward 7 - nominated by Tania Charlton
- Richelle Timmins, visiting neurodevelopmental therapist (VNT), Child Development Service - nominated by Roz Cranswick
- Nicky Headifen, clinical charge nurse, Emergency Department, Waitakere Hospital - nominated by Nicky Anderson
- Sheryll Broederlow, dental therapist, ARDS - nominated by Matthew Rogers
- Dianne Houston, team leader, ARDS - nominated by Maria Humphries
- Vince Valdez, registered nurse, Community Mental Health - nominated by Mimoza Trencova
- Tori Hayward, registrar, Ward 14 - nominated by Anna Hart
- John Ngui, house officer Ward 14 - nominated by Anna Hart
- Annette Flanagan, associate clinical charge nurse, ICU/HDU - nominated by Charlotte Firth
- Rochelle Paice, registered nurse, ICU – nominated by Emma Williamson
- Vivienne King, clinical nurse specialist, Haematology – nominator requested anonymity
- Naomi Nel, booking and scheduling clerk – nominated by Heather Simonsen
- Gaye Burt, booking and scheduling clerk – nominated by Heather Simonsen
- Sue Benton, ward clerk – nominated by Kirsten Ter Braak
- Brenda Cameron, orderly – nominated by Kirsten Ter Braak
- Christine Kernot, receptionist, Totara Clinic New Lynn – Nominated by Christopher Peterson

2. Upcoming events

Looking toward the upcoming months, we can expect to see:

- Our next GP Connections Forum, to be held at North Shore Hospital on 11 November, with a focus on Women's Health.
- Further progress on the next phase of 'Our Values, Your Values' activity.
- Further progress on expansion of Waitakere Hospital Emergency Department.
- Expansion of mental health services available at Waitakere Hospital Emergency Department.
- Progress on the front-of-house upgrades at North Shore Hospital.
- Official opening of our first-ever dedicated women's ward on 6 November.
- Opening of seminar rooms, quiet room, Spiritual Centre on Level 3 Podium in early December.
- Final address of the 2015 CEO Lecture Series on 3 November.

3. Future Focus

The Leapfrog programme was established as a means to support a focused, intensive burst to take a large leap in moving the DHB from where we are to where we want to be.

The programme consists of a small number of strategic organisation-wide projects that are resourced to achieve significant change and impact on health outcomes and patient/family experience.

The intended benefits are to move these projects along at a faster pace with top-level support for the significant changes required, giving greater visibility and attention to those projects identified as being important in achieving the DHB's priorities and purpose as well as instilling the culture of improvement and innovation.

Mobility Strategy
The Mobility Strategy work continues with a Mobile Device Management (MDM) platform contract being finalised and a Mobile Enterprise Application Platform (MEAP) tender underway. The team has been working on supporting the ePrescribing MedChart application as it rolls out to the Waitakere Hospital Emergency Department and beyond. Due to the obvious overlap with Leapfrog projects, and the opportunity to learn from the established team, ePrescribing is now coming into the Leapfrog programme umbrella.

eVitals
Approval was received from the Director-General for this project to proceed on 7 October. The eVitals project with the vendor has kicked-off with both technical and clinical workshops. Lead positions are now in place and project execution planning is underway. Consideration is being given to the devices to be used across eVitals, ePrescribing and other digital projects. The project will be implemented progressively throughout 2016, with rollout completion expected by early 2017.

eOrders
eRadiology is scheduled to start go-live in December and eLaboratory in May 2016. The Patient Experience Reporting System project has a project manager on board preparing for a tender process, while exploring existing potential solutions.

Unfortunately the voice-to-text software implementation has been slowed down due to pressures on healthAlliance resources. We are hoping to have revised timeframes to report on shortly.

Work on Primary Care Connections and communications has sparked some interesting potential projects around digital communications and telehealth. These are currently being worked-up for presentation to the Board.

The Best Facilities Design work included the establishment of a Design Group which has drafted Core Design Principles for all projects across the DHB. These will be presented to the Board for review shortly. The group is now working on the applying these principles to the 'ideal ward' to inform the planning of future facilities projects and feed into the Master Site Plan.

4. Outcomes discussion

This month, I have asked Dr Carlene Lawes of our Surgical and Ambulatory Services to report on the implementation of the surgical safety checklist and its implications for mortality at Waitemata DHB.

Summary

Death is a relatively uncommon post-operative complication and Waitemata DHB has the lowest hospital standardised mortality rate in New Zealand.

American surgeon, author and public health researcher Atul Gawande, and others, devised the surgical safety checklist and worked with the World Health Organisation to implement it internationally.

In the subsequent WHO study, post-operative inpatient mortality rates in a group of international hospitals dropped from 0.9% to 0.6% following implementation of the checklist. We reviewed Waitemata DHB mortality data over the period that the Surgical Safety Checklist was implemented.

Overall, we found a crude post-operative inpatient mortality rate of 0.29% before checklist implementation, 0.31% during implementation, and 0.21% post-implementation.

Crude mortality rates were higher among acute patients than elective, and higher in General Surgery and Orthopaedics than other surgical specialities, as expected.

Over the time frame of interest, there was possibly a small reduction in overall crude mortality rates in the order of 0.1-0.2%.

Interpretation of crude mortality rates is limited as there is no adjustment for other important factors such as differences between the time periods in patient age, co-morbidities or risk factors (such as smoking, diabetes), operation factors such as type and complexity of procedures performed between and within surgical specialities, and secular trends from 2008 – present.

Going forward, the DHB will be actively tracking mortality rates overall for Waitemata DHB as a whole and also by division and specialty through a Mortality Interest Group. This will complement other ongoing activities such as departmental reviews and M&M meetings.

Data on several other post-operative complications will be collected as part of the S&AS Excellence Programme with Departmental Excellence Metrics. These metrics complement other ongoing surgical audit and review.

Background

The WHO's 'Safe Surgery Saves Lives' programme included implementing a 19-item Surgical Safety Checklist. As part of this, a study was undertaken (Oct 2007 to Sept 2008) which included eight hospitals in eight cities (Toronto, Canada; New Delhi, India; Amman, Jordan; Auckland, New Zealand; Manila, Philippines; Ifakara, Tanzania; London, England; and Seattle, WA).[1] Some results from this study were presented by Atul Gawande earlier this year at the HQSC forum. In summary;

- Pre-checklist implementation data was prospectively collected from 3,733 consecutively enrolled patients aged 16+ years undergoing non-cardiac surgery.
- After the introduction of the Surgical Safety Checklist, data was collected on 3,955 consecutively enrolled patients.
- The primary end point was the rate of complications, including death, during hospitalisation within the first 30 days after the operation. (Patients were followed until discharge or for 30 days, which ever came first.)

Death rate reduced		
Total sample	1.5% to 0.8%	p = 0.003
High income areas	0.9% to 0.6%	p = 0.18
Lower income areas	2.1% to 1.0%	p = 0.006
Deaths in 'urgent' (acute) cases reduced[2]		
Total sample	3.7% to 1.4%	p = 0.0067
Inpatient complications reduced		
Total sample	11.0% to 7.0%	p <0.001
High income areas	10.3% to 7.1%	p <0.001
Lower income areas	11.7% to 6.8%	p <0.001

Of importance, the reduction in deaths was smaller and non-significant in high-income areas than in lower-income areas. A second follow-up paper limited analyses to 'urgent' (acute) cases, which

[1] Haynes AB, Weiser TG, Berry WR et al. A Surgical Safety Checklist to Reduce Morbidity and Mortality in a Global Population. *N Engl J Med* 2009; 360:491-499

[2] Weiser TG, Haynes AB, Dziekan G, et al. Effect of A 19-Item Surgical Safety Checklist During Urgent Operations in A Global Patient Population *Ann Surg* 2010;251: 976–980

noted higher rates of death and greater reductions post-checklist than in the total sample (no breakdown by income level). Inpatient complications also declined significantly.

We cannot duplicate this study as it was undertaken prospectively at each site by a specifically trained data collector working fulltime on the study. In addition, the study time frames were less than one year to limit the impact of secular trends on the results; time frames are longer at Waitemata DHB. However, we can examine crude post-op in-hospital mortality over the implementation of the SCC.

Question

What are Waitemata DHB post-operative inpatient death rates before, during and after implementation of the SSC?

Mortality data extracted from the data warehouse

Monique Greene (Decision Support) extracted the following data:

- Data for patients who died in-hospital and had also had an in-theatre surgical procedure during the same admission. Therefore, the extract excludes surgical patients who died during an admission where there was no surgical procedure and also excludes those who only had procedures outside theatre.
- The data time range covered pre, during, and post-implementation of the surgical safety checklist, as suggested by Liz Hollier, i.e.

Time period	*Implementation phase of Surgical Safety Checklist (SSC)*
2008 – 2010	Pre-checklist
2011 - 2012	Period when check list was being implemented
2013 – Sept 2014	Post check-list – paper based system
Oct 2014 – present	Paperless checklist + three-monthly observational audits and designated lead roles

- The extract also included all surgical discharges from hospital over the same time frame where patients had had an in-theatre surgical procedure. This provided the denominator for calculating crude mortality rates.

Variables included in the extract were

Variable type	*Individual variables*
Time period	In relation to dates above for SSC
Dates	Admit date, Last Theatre Date, Discharge date, Date of Death (if relevant) Days From Last Theatre Event To Death
Patient details	NMPI, Age (year), Age Group (0-14, 15-44, 45-64, 65-74, 75+) Gender, Ethnicity, Ethnic Group (Maori, Pacific, Asian, Other)
Admission details	Admit Type (Acute admission, Arranged admission, Waiting list)[3] Admit Specialty (All specialties) DIAGNOSIS A (Description) Discharge Specialty (ENT surgical, General Surgical, Gynaecology, Orthopaedic, Urology)
Health details	ASA (American Society of Anaesthesiologists preoperative assessment score)[4]

[3] Acute admission (acute staying in hospital), Arranged admission (Acute cases sent home and returned for surgery within 7 days), Waiting list (Elective cases)

	CCL (Clinical complexity level)[5]
Theatre details	OP_A, OP_B, OP_C, OP_D (prioritized ICD procedure codes) Theatre Events (Number of events during admission) Last Theatre Procedure (WDHB theatre code) Encounter (encounter number)
Death details	Deceased (In hospital or post discharge – if relevant) Palliative Care (Specified palliative care patient by palliative care team)

In-hospital post-operative mortality data for S&AS

Table 1 shows the number of in-hospital post-operative deaths and associated crude mortality rates, over the time frames relevant to the implementation of the Surgical Safety Checklist.

Table 1. In-hospital post-operative deaths during timeframes associated with implementation of the surgical safety checklist, Waitemata DHB

Time period	Period duration	Post-operative In-hospital deaths	Total discharges	Crude in-hospital death rate
		All S&AS post-operative patients		
Pre-checklist 2008-10	36 mths	119	40902	0.29%
Implementation SSC 2011-12	24 mths	100	32498	0.31%
Paper checklist 2013-Sept14	21 mths	59	29976	0.20%
Paperless checklist Oct14-present	8 mths	27	12777	0.21%
Total		**305**	**116153**	**0.26%**
		Excluding known palliative care patients		
Pre-checklist 2008-10	36 mths	119	40261	0.30%
Implementation SSC 2011-12	24 mths	76	31858	0.24%
Paper checklist 2013-Sept14	21 mths	40	29557	0.14%
Paperless checklist Oct14-present	8 mths	16	12690	0.13%
Total		**251**	**114366**	**0.22%**

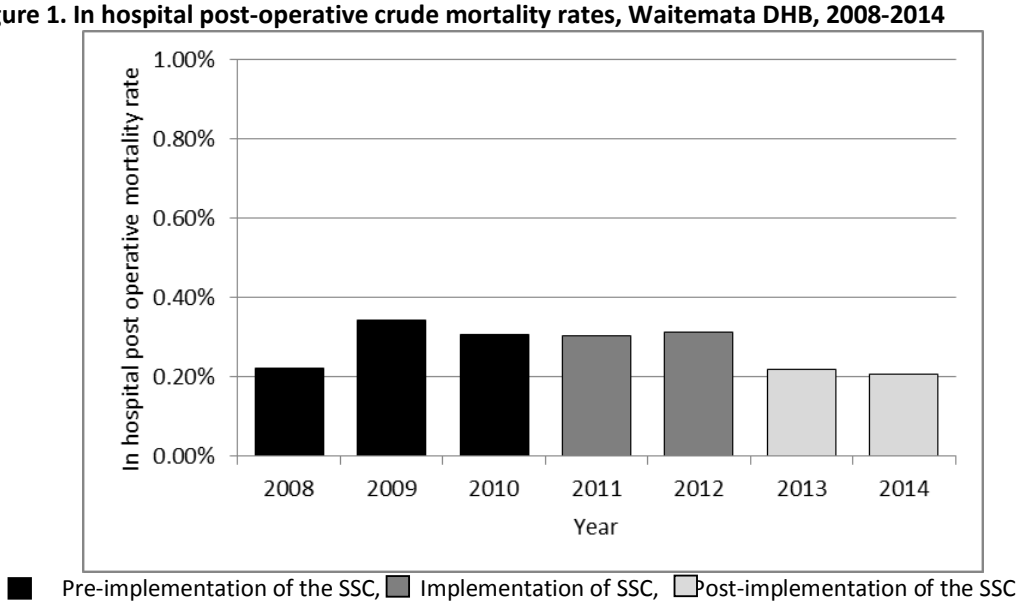
If data are grouped more broadly;
pre-checklist and implementation phase (2008 – 2012 inclusive)
overall crude in hospital post-operative mortality rate = 0.30% (219 deaths in 5 years)
Combined post-checklist phase (2013 – June 2015)
overall crude in-hospital post-operative mortality rate = 0.20% (86 deaths in 2 ½ years)

[4] *ASA physical status classification system*. P1. Healthy person. P2. Mild systemic disease.
P3. Severe systemic disease.P4. Severe systemic disease that is a constant threat to life.
P5. A moribund person who is not expected to survive without the operation.
P6. A declared brain-dead person whose organs are being removed for donor purposes

[5] *CCL* comes out of the DRG grouper program and identifies the clinical complexity/severity within a DRG code.
1 minor CC or non-CC, 2 moderate CC, 3 major CC, 4 extreme CC

Crude in-hospital post-operative mortality rates may also be shown by full calendar years for 2008-2014 inclusive, Figure 1.

Figure 1. In hospital post-operative crude mortality rates, Waitemata DHB, 2008-2014



Results

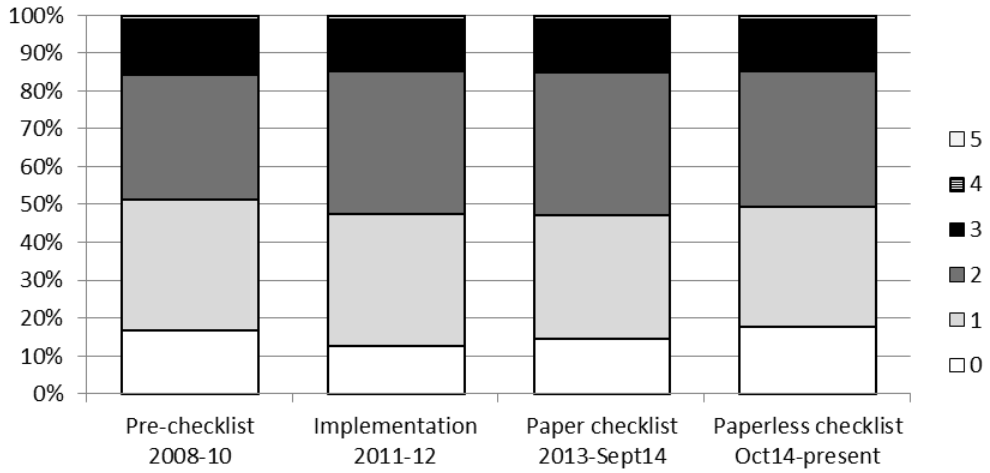
- Overall, the crude mortality rates have remained low ranging from 0.20% - 0.31% (0.26% overall) across the four time periods, representing a proportional reduction of around one-third.
- If those who had been identified as palliative care patients are removed (n = 54), the mortality rates decrease with an overall crude rate of 0.22% across the time periods.
- Overall there may be a decrease in crude mortality rates over time in the order of 0.1-0.2% for all post-operative patients. The apparent decrease was larger when palliative care patients were excluded. However, coding of palliative care has increased over time.

Points to note / limitations of data

- The timeframes under consideration vary in duration from eight months to 36 months, which is a major contributor to the differences in the number of deaths and discharges.
- These are crude mortality rates only. There is no adjustment for other important factors such as differences between the time periods in patient age, co-morbidities or risk factors (such as smoking, diabetes), or operation factors such as type and complexity of procedures performed between and within surgical specialties.
- The total time frame is relatively long (2008-present) and any changes in approaches to patient management and other secular trends are not adjusted for.

It is not possible here to do a detailed adjustment of mortality rates for all relevant patient factors. However, a review of all post-operative hospital discharges can give a very broad indication whether there are any substantial changes in ASA status or age group of these S&AS patients over the time periods of interest. As shown below, there were no substantial changes over time in these variables for patients discharged post-operatively across all surgical specialities.

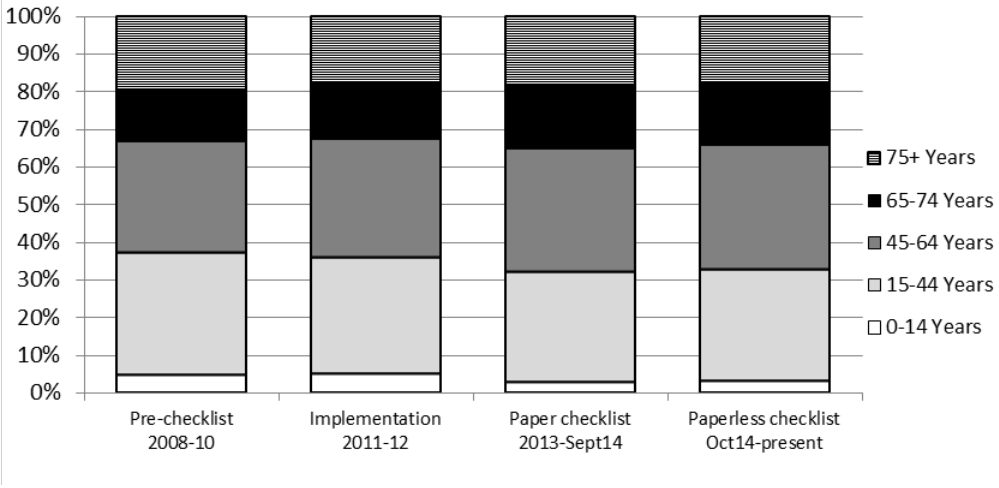
Figure 2. Post-operative hospital discharges by patient ASA status over the implementation of the surgical safety checklist



Over the four time periods relevant to SSC implementation, the proportions of surgical patients in each of the ASA categories remained relatively stable (Figure 2). Approximately 30% were in ASA1, one third were ASA2, and 13-14% were classified as 0 or ASA3. In each time period, about 3-5% of patients did not have a coded ASA status.

There were no substantial changes in the proportions of surgical patients in each age category over the four time frames relevant to SSC implementation (Figure 3).

Figure 3. Post-operative hospital discharges by patient age group over the implementation of the surgical safety checklist



These patterns of consistent age and ASA status distribution across the four time periods are for all post-operative discharges combined and may disguise differences over time in specific subgroups.

In-hospital post-operative mortality data by admission type

In-hospital post-operative deaths may be grouped according to whether admissions were acute, arranged or from the waiting list (elective). Over the four time periods, about one-third of all post-operative discharges were acute patients (range 32-37%), two-thirds were elective/waiting list (range 61-67%) and only 1-2% were arranged. The number of deaths and crude mortality rates over the SCC time periods are given by admission type in Table 2.

Table 2. In-hospital post-operative deaths and crude mortality rates during implementation of the surgical safety checklist, by admission type, Waitemata DHB

	Acute admission		Arranged admission	
	n	Mortality rate	n	Mortality rate
Pre-checklist 2008-10	103	0.69%	6	0.57%
Implementation SSC 2011-12	86	0.80%	1	0.23%
Paper checklist 2013-Sept14	50	0.50%	0	-
Paperless checklist Oct14-present	24	0.58%	0	-
Total	**263**	**0.66%**	**7**	**0.37%**

Results

- The majority of post-operative in-hospital deaths occurred among acute admissions, 86% overall, (range 85% - 89% across the SCC time periods) and a further 11% (range 8-15%) were among elective/waiting list patients.
- The numbers of deaths among arranged and waiting list patients were too small to see any patterns over time.
- Among acute patients, crude mortality rates ranged from 0.5% to 0.8% across the four time periods. The differences in crude mortality rates between time periods were, therefore, very small and while there may be an overall trend for crude mortality rates to have decreased it is only in the order of 0.1 – 0.2% from the pre-checklist to post-checklist periods.

Points to note / limitations of data

- As with the data for all discharges combined, these are crude mortality rates only. There is no adjustment for other potentially important factors which may have changed over time such as patient demographics or co-morbidities, secular changes, and type and complexity of procedures performed between and within surgical specialties.
- The changes in mortality rates between time frames are small (≤0.3%) and in some cases may simply reflect volatility of small numbers, particularly where there are low discharge/death numbers and/or short time frames (such as the last time period).
- Without further detailed analysis, is not possible to tell whether any differences in mortality rates between time periods (e.g. the apparent higher crude mortality rate for acute cases during the implementation phase) are significant, or comment on what may have contributed to this.

In-hospital post-operative mortality data by surgical specialty

Over the timeframes pre, during, and post-implementation of the SSC, in-hospital post-operative deaths may also be grouped according to the surgical discharge specialty. Those included in these data were General Surgical, Orthopaedic, Urology, ENT Surgical and Gynaecology. There were no deaths under ENT Surgical, so it was excluded from the following table.

Of the remaining specialties, over the four time periods, about 40% of all post-operative discharges were General Surgical patients (range 39-41%), one-third were Orthopaedic Surgical (range 32-34%), 11-12% were Urology and 16-17% were Gynaecology. The number of deaths and crude mortality rates over the SCC time periods are given by discharge specialty in Table 3.

Table 3. In-hospital post-operative deaths during timeframes associated with implementation of the surgical safety checklist by discharge specialty, Waitemata DHB

	General Surgery		Orthopaedics		Urology		Gynaecology	
	n	Mortality rate	n	Mortality rate	n	Mortality rate	n	Mortality rate
Pre-checklist 2008-10	60	0.40%	56	0.47%	2	0.05%	1	0.02%
Implementation SSC 2011-12	64	0.56%	35	0.37%	1	0.03%	0	0.00%
Paper checklist 2013-Sept14	36	0.34%	22	0.24%	0	0.00%	1	0.02%
Paperless checklist Oct14-present	17	0.38%	9	0.23%	1	0.08%	0	0.00%
Total	**177**	**0.43%**	**122**	**0.36%**	**4**	**0.03%**	**2**	**0.01%**

Results

- Of the 305 post-operative in-hospital deaths that occurred at Waitemata DHB during the specified time period, the majority occurred in General Surgery (177, 58%) and Orthopaedics (122, 40%). There were four deaths in Urology and two in Gynaecology.
- Crude mortality rates ranged from 0.34% – 0.56% in General Surgery and 0.23 – 0.47% in Orthopaedics, i.e. there were relatively small differences between periods as the total range was of the magnitude of only 0.22% - 0.24% in both specialties.
- Overall, the crude mortality rates appear to have decreased by 0.24% in Orthopaedics. However, in General Surgery the pattern is less clear, with higher crude mortality rates during the SCC implementation phase so that the pre and post-checklist difference is actually very small (0.02%).

Points to note / limitations of data

- As per earlier sections, these are crude mortality rates and are, therefore, not adjusted for the range of patient and hospital/patient management factors that may have also differed between the study periods.
- Overall, the changes in mortality rates over time and differences between time periods are very small.
- If the pre-checklist mortality rate for General Surgery (0.40%) is compared to the combined crude mortality rate for the periods post SCC implementation (0.35%), then there is a difference of only 0.05%.

5. Board performance priorities

The following provides a summary of the work underway to deliver on the DHB's priorities:

Relief of suffering

Progress: ✔

Patient and Whānau Centred Care

Patient feedback

- *National Inpatient Survey*

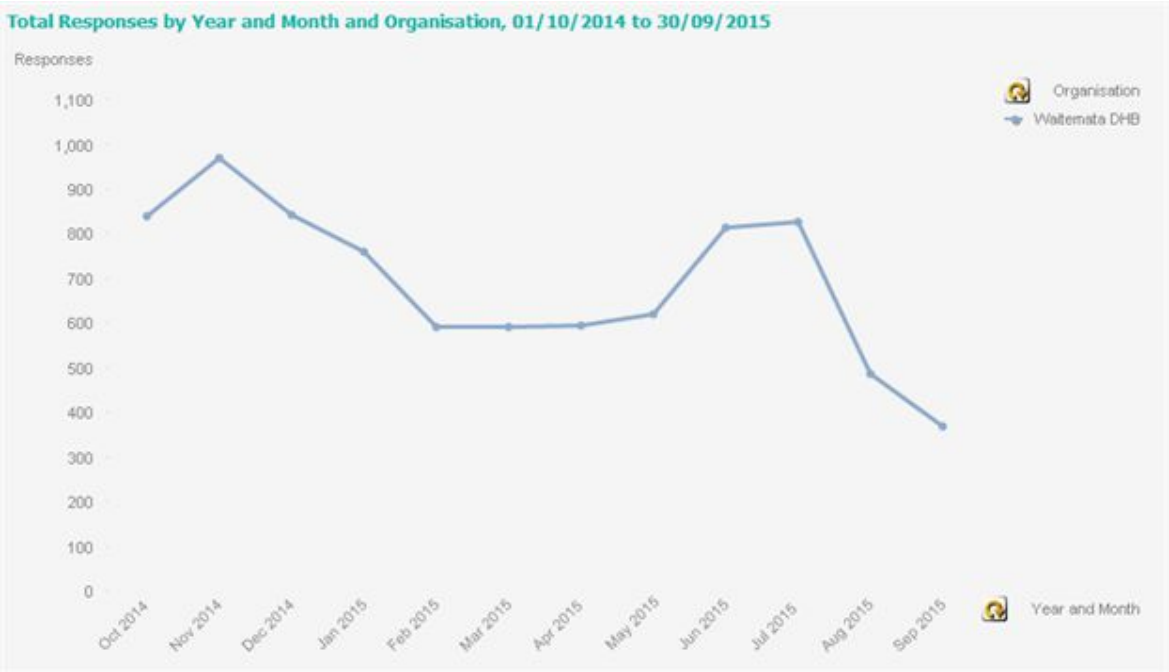
The latest (fifth) national inpatient survey (Quarter 1 FY 2015: July-Sept 2015) commenced on 25 August. The survey covers a two-week period of admission (patients discharged between 3 - 16 August). The deadline for responses was 7 October and final weighted results are now through and show further improvement. 121 (30%) people completed the latest survey.

Detailed data analysis is being undertaken to identify trends and key themes over the previous four quarters. The free-text comments will be built into the qualitative values-based organisational report.

- *Friends and Family Test*

During August and September 2015, 861 people provided feedback through the Friends and Family Test (FFT). There have been multiple issues with the survey application and connectivity. Some wards have had problems collecting and uploading data to the system, partly explaining the significant drop in numbers of people completing surveys.

A business case for the redevelopment of the Friends and Family Test was approved and is going to RFP. The intention is to create an in-house survey system that allows clinical areas to ask locally meaningful questions and brings together staff and patient experience. Results will be mapped to the organisation's values and standards in order to better-inform and prioritise continuous quality improvement activity at ward level.



Net Promoter Score by Division, Questions and Answers

Division	Responses	NPS by Question	Question	A..	Extremely likely	Likely	Neither likely nor unlikely	Unlikely	Extremely unlikely	Don't know
Waitemata DHB	858	62	How likely are you to recommend our ward to friends and family if they needed similar care or treatment		67.1%	24.0%	2.3%	2.1%	0.9%	3.1%
					Extremely likely	Likely	Neither likely nor unlikely	Unlikely	Extremely unlikely	Don't know
Child Women & Family	224	50	How likely are you to recommend our ward to friends and family if they needed similar care or treatment		56.7%	31.3%	3.6%	1.8%	1.8%	4.9%
Medicine & Health of Older People	456	61	How likely are you to recommend our ward to friends and family if they needed similar care or treatment		66.0%	25.4%	2.4%	2.2%	0.9%	3.1%
Surgical & Ambulatory Services	178	81	How likely are you to recommend our ward to friends and family if they needed similar care or treatment		84.3%	11.8%	0.6%	2.2%	-	1.1%

Division	Responses	NPS by Question	Question	Excellent	Good	Fair	Poor
Waitemata DHB	858	77	Did we show care and respect?	78%	19%	2%	1%
Waitemata DHB	858	70	Did we listen and explain?	71%	26%	2%	1%
Waitemata DHB	858	66	Did we see you promptly?	67%	29%	4%	1%
Waitemata DHB	858	66	Did we meet your expectations?	67%	28%	4%	1%
Waitemata DHB	858	81	Were we welcoming and friendly?	82%	16%	2%	1%
Child Women & Fam	224	62	Did we listen and explain?	63%	32%	3%	2%
Child Women & Fam	224	58	Did we meet your expectations?	60%	31%	7%	2%
Child Women & Fam	224	57	Did we see you promptly?	58%	35%	5%	1%
Child Women & Fam	224	65	Did we show care and respect?	67%	26%	4%	2%
Child Women & Fam	224	71	Were we welcoming and friendly?	74%	20%	4%	3%
Medicine & Health of	456	66	Did we see you promptly?	66%	30%	3%	0%
Medicine & Health of	456	80	Did we show care and respect?	81%	17%	1%	1%
Medicine & Health of	456	69	Did we listen and explain?	70%	28%	2%	1%
Medicine & Health of	456	66	Did we meet your expectations?	67%	29%	3%	1%
Medicine & Health of	456	83	Were we welcoming and friendly?	83%	16%	1%	-
Surgical & Ambulato	178	77	Did we meet your expectations?	78%	19%	3%	1%
Surgical & Ambulato	178	86	Did we show care and respect?	86%	13%	1%	-
Surgical & Ambulato	178	79	Did we see you promptly?	80%	16%	3%	1%
Surgical & Ambulato	178	84	Did we listen and explain?	84%	16%	1%	-
Surgical & Ambulato	178	89	Were we welcoming and friendly?	89%	8%	2%	1%

The third round of values-based reports was being prepared in October. These reports map the qualitative (free-text) feedback from the FFT and to the values to provide a patient and whānau-centred measure of our performance against the values and behavioural standards. The first two sets of reports show unequivocally that being welcoming and friendly is the most significant driver of a positive experience. As a result, we introduced an additional question to the FFT: "Were we welcoming and friendly?" so that we can continue to monitor performance in real-time. The Net Promoter Score (NPS) for this additional question ("Were we welcoming and friendly?") was 81 across August and September 2015, the highest NPS of all FFT questions.

- *Happy or Not*

10 'Happy or Not' devices have been in use since February 2015, asking a single question: "were we welcoming and friendly?" The devices have four smiley-face response options and have been

successful in collecting mass feedback. To date, the DHB has received 24,030 responses. Recently, they showed a significant improvement in experience in the North Shore Hospital Discharge Lounge following the move to a new environment.

- *Patient Stories*

  A total of 23 patient videos have been completed, including stories about dental services, mental health services, Asian health support services, thrombosis services, disability support, surgical services, SCBU, emergency admissions and discharge planning. The stories can be used for staff training, public awareness (where consent allows) and to complement other patient experience data sources. Those that are able to be viewed publicly are available on the DHB website at www.waitematadhb.govt.nz/Patients-visitors/Patient-stories.

Patient Information

- *Patient Information booklet*

  Confirmation has been received the patient information booklet can be printed. Final review, including further consumer input, is currently underway.

- *Quality boards*

  The new quality boards have been rolled out in medical and surgical wards and reviews of the content have commenced for mental health and child, women and family services. Positive feedback has been received about the final design (below).

Continuous Quality Improvement

- *IDEAS improvement methodology*

  IDEAS has replaced STEPS in the DHB quality improvement toolkit and a training package is being developed. All charge nurses are using the IDEAS improvement methodology and a group of 30 allied health leaders have attended a workshop to begin implementing IDEAS. An app has been developed to support staff in moving through the process and to allow for documentation and sharing of projects.

- *Six ward priority projects*

  The Senior Management Team has agreed on six priority projects that all wards are expected to implement.

- Welcoming and Friendly
- Care Standards
- Friends and Family Test
- Bedside Handover
- Protected Mealtimes
- Discharge Calls

Many areas have already implemented these projects. Senior managers now meet regularly to maintain momentum and ensure timely implementation. Progress is reported monthly at divisional meetings and is noted on Quality Boards.

Facilities development

He Puna Waiora
Minor post-occupancy improvements are ongoing in the unit. Revised courtyard barrier design has been coordinated with as-built documentation and resource consent lodgement is underway.

Level 3 Podium
Façade is complete and scaffold has been disassembled and removed from site. Gib stopping and painting is underway. Chapel cabinetry and panelling is under production.

Level 2 Gynae
Handover of the ward has been undertaken. Furniture and fixtures are being delivered. Staff orientation and training is commencing.

Better Outcomes ✔
Progress: On track

Achieving the health targets – September 2015

- **Shorter Stays in Emergency Departments – 91% (target 95%)**
- **Improved Access to Elective Surgery – 100% (target 100%)**
- **Increased immunisation – 93% (target 95%)**
- **Better help for hospitalised smokers to quit – 98% (target 95%)**
- **More heart and diabetes checks – 91% (target 90%)**
- **Faster Cancer Treatment (FCT) – 73% (target 85%)***

  * The FCT is a Ministry of Health priority and includes a cohort of patients who are referred to the DHB with a high suspicion of cancer. The target is 85 per cent of this cohort of patients will receive cancer treatment, or other management, within 62 days from their referral-received date. This target is to be met by July 2016.

Health Quality and Safety Markers

Falls
Falls risk assessment audits that inform the Health Quality and Safety Commission data continue and are conducted monthly. At the end of September, both MHoPS achieved 96% and Surgical & Ambulatory Services achieved 100% in falls risk assessments being completed on patients within eight hours of admission (against a target of 90%).

Hand Hygiene
In the June 2015 national Gold Hand Hygiene, we remained consistent with good practice on 80 per cent of occasions, meeting the national target of 80%. Next National Audit was due October 2015.

Healthcare-Associated Infections
The CLAB insertion bundle was used in ICU on 97 per cent of occasions for September. The insertion bundle compliance meets the national target of 90%.

Elective Surgery Centre

ESC delivered its reportable health target volumes at 104% for quarter one of the 2015/16 financial year and down to 100% for September. We are working alongside the S&AS team to ensure that the operating sessions are managed collectively over all three sites to ensure that the overall delivery of the DHB health target volumes are on-track and within the resource budget.

Volumes for September have levelled off now, as we ensure we are working strictly to our resourced production planned numbers. ESC discharged 423 patients for the month, which included ACC, IDF and a number of acute arranged patients.

HealthPoint Website Usage
The HealthPoint website is a popular tool, used by medical specialists and GPs throughout Auckland, Northland and the Waikato. It receives 233,000 visits per month and provides specialist medical services information for public and private consumers.

In September 2014, ESC comprehensively updated its information on the website and has now found that the uptake over the past 12 months has been excellent. Just short of 5,000 people have been influenced by our specific service page. This is the number of people who are directly typing in 'ESC' to search for our information. The growth of interest in the facility is highly encouraging.

Surgical Briefing/Debriefing Project
As part of the 'Reducing Perioperative Harm' project, the HQSC is rolling out a new 'teamwork and communication bundle' which involves the use of surgical briefings and debriefings alongside the Surgical Safety Checklist.

Over the next 16 months, the HQSC will be rolling-out a package relating to surgical briefing and debriefings to DHBs and subsequently establishing a new QSM measuring surgical teams' engagement with the teamwork and communication tools. Waitemata DHB is in cohort 1, with initial engagement and learning sessions in June-Sept 2015, followed by delivery and then transition to business-as-usual, intended for mid-2016.

Continued utilisation of excess beds at ESC
To assist with the bed management over the peak period, ESC ward beds are now utilised in the following manner:

- Gynaecology Outpatient & Colposcopy Clinic – six single bedrooms
- Interim Care Patients (under the care of Geriatricians) – eight single bedrooms
- Standard ESC Patients – 26 Beds (two single bedrooms and six four-bedded rooms)

ESC is working alongside the GM S&AS to determine an alternative use for the eight spare beds once the Women's Ward beds are opening at the beginning of November, by moving post-operative surgical patients to ESC.

Māori Health

Ethnicity Data Audit Toolkit
Waitemata DHB has become the first DHB in the country to have implemented the Ethnicity Data Audit Toolkit (EDAT). Our Maori Health Gain Team has rolled the toolkit out to 98 per cent of general practices and in doing so exceeded the Ministry of Health's national target of 95 per cent. This initiative is a key part of the Maori Health Plan and will better-enable us to monitor and act on health disparities. The EDAT rollout is further discussed in Board agenda item 5.1.

Smoking cessation
The Māori Health Gain Team is leading the development and implementation of an evidence-based incentives programme to support pregnant mothers to become and stay smokefree. The programme offers pregnant mothers who smoke an incentive to quit smoking, followed by further incentives to stay smokefree. The 20-week programme consists of two weeks focusing on initial engagement, 16 weeks focusing on key milestones to quit smoking during pregnancy and a further two weeks post-partum. The programme was endorsed the Waitemata DHB Board and was launched on 5 October. Recruitment of participants has begun.

Cardiovascular rehabilitation
The Māori Health Gain Team is leading the development of guidelines for phase two cardiac rehabilitation in the community. The guidelines have been drafted and are being reviewed by the Northern Regional Alliance Rehabilitation Network.

Māori DNA strategy
Discussion is underway with key people involved with Did Not Attend (DNA) strategies and projects around the country and a review of project documents has been undertaken. Elements of the strategy have been outlined and an assessment of progress against these elements for work already underway will be initiated shortly. The purpose of the strategy is to clearly articulate the current knowledge about DNAs within the local DHB context and to propose a coherent set of actions to reduce the inequalities in DNA rates.

Waitemata DHB Monthly Performance Scorecard

CEO Scorecard
September 2015
2015/16 Q1

Health Targets

	Actual	Target		Trend	
Better help for smokers to quit - hospitalised	98%	95%	●		--
Better help for smokers to quit - primary care	*98%*	*90%*	●		▼
Improved Access to Elective Surgery - WDHB*	100%	100%	●		▼
Shorter Waits in ED	91%	96%	●		▼
Faster cancer treatment (62 days)	73%	85%	●		▼
Increased immunisation (8-month old)	93%	95%	●		--
More Heart & Diabetes Checks	*91%*	*90%*	●		--

** 2015/16 Health Target definition*

Provider Arm - Service Delivery

Waiting Times	Actual	Target		Trend	
ESPI					
a. ESPI 2 - % patients waiting > 4 months for FSA	*compliant*				
a. ESPI 5 - % patients not treated within 4 months	*compliant*				
Diagnostics					
% of CT scans done within 6 weeks	96%	90%	●		▲
% of MRI scans done within 6 weeks	88%	80%	●		▼
b. Urgent diagnostic colonoscopy (14 days)	77%	75%	●		▼
b. Diagnostic colonoscopy (42 days)	46%	65%	●		▼
b. Surveillance colonoscopy (84 days)	69%	65%	●		▼
Patient Flow					
Elective Surgical Discharges (YTD)					
Elective Discharges - Total	4,855	4,860	●		▼
Elective Discharges - Provider Arm	3,313	3,330	●		▼
Elective Discharges - IDF Outflow	1,542	1,530	●		▼
Efficiency					
Outpatient DNA rate (FSA + FUs)	10%	<10%	●		▼
c. Average Length of Stay - Electives	*#N/A*	*#N/A*			
c. Average Length of Stay - Acutes	*#N/A*	*#N/A*			

Best Care

Patient Experience	Actual	Target		Trend	
Complaint Average Response Time	10 days	<14 days	●		▲
FFT - Net Promotor Score	62	65	●		▼
Quality & Safety					
Older patients assessed for falling risk	100%	90%	●		▲
Occasions insertion bundle used	97%	95%	●		▲
Good hand hygiene practice	84%	80%	●		▲
Pressure injuries grade 3&4	0.00	0.00	●		--
ICU - CLAB rate per 1000 line days	0.61	<1	●		▲
Antibiotic in the right time	*97%*	*100%*	●		--
Improving outcomes					
Population coverage/Access					
Cervical Screening	*76%*	*80%*	●		--
Breast screening	*68%*	*70%*	●		--
d. Bowel Screening Participation					
- Round 2 - first screen	*42%*	*60%*	●		▲
- Round 2 - second screen	*82%*	*60%*	●		▲
Treatment					
HSMR (Source: Health Round Tables)	*86%*	*99%*	●		▲
e. Surgical intervention rates (per 10,000 pop)					
- Angioplasty	*14.6*	*12.5*	●		▲
- Angiography	*39.2*	*34.7*	●		▼
- Major joints	*23.9*	*21*	●		▼
- Cataract	*30.8*	*27*	●		▲
f. # NOF patients to theatre (48 hours)	*93%*	*95%*	●		▲
ST elevation MI receiving PCI (120 mins)	*84%*	*80%*	●		▲
AT&R referrals assessed (2 working days)	92%	90%	●		▼

Managing our Business

Staff Experience	Actual	Target		Trend	
Sick leave rate	8.6 days	<7.5 days	●		--
Turnover rate	10%	<10%	●		▼
Lost time injury rate (avg hrs/100 FTE)	0.30	<3	●		▲
Financial Result					
Net Surplus/Deficit (YTD)	3,046 k	2,877 k	●		

Major Capital Programmes	Time	Budget	Quality
Te Atarua car park (Sep 2015)	●	●	●
NSH Gynaecology beds (Oct 2015)	●	●	●
Department of Medicine (Mar 2016)	●	●	●
WTH Emergency Department revelopment (Apr 2016)	●	●	●
Mason clinic - 15 Bed medium secure unit (Jun 2016)	●	●	●
Bridge ESC To Medical Tower (Jun 2016)	●	●	●
Lakefront (Dec 2016)	●	●	●
New Medical Tower (TBA)	●	●	●

How to read

Performance indicators:

- ● Achieved/ On track
- ● Substantially Achieved but off target
- ● Not Achieved but progress made
- ● Not Achieved/ Off track

Trend indicators:

- ▲ Performance ***improved*** compared to previous month
- ▼ Performance ***declined*** compared to previous month
- -- Performance was ***maintained***

Key notes

1. Most **Actuals and targets** are reported for the reported month/quarter (see scorecard header).
2. ***Actuals and targets*** in *grey bold italics* are for the most recent reporting period available where data is missing or delayed.
3. **Trend lines** represent the data available for the latest 12-months period. All trend lines use auto-adjusted scales: the vertical scale is adjusted to the data minimum-maximum range being represented. Small data range may result small variations perceived to be large.

a. ESPI traffic lights follow the MoH criteria for funding penalties:
ESPI 2: the traffic light will be green if no patient is waiting, blue if greater than 0 patients and less than or equal to 10 patients or less than 0.39%, and red if 0.4% or higher.
ESPI 5: the traffic light will be green if no patient is waiting, blue if greater than 0 patients and less than or equal to 10 patients or less than 0.99% and red if 1% or higher.

b. Available every 20th of the month.
c. 2015/16 MoH ALOS definition not yet implemented in reporting services.
d. As of End of March 2015.
e. Reported one quarter in arrear.
f. Reported one month in arrear.

A question?

Contact:
Lisianne Hoch - Planning & Funding Analyst, Planning & Health Intelligence Team: lisianne.hoch@waitematadhb.gov.nz
Planning, Funding and Health Outcomes, Waitemata DHB

Events in your Community

PERINATAL MENTAL HEALTH
Wed 4 Nov, 6-8pm $40
Hosted by Jude Dobson sharing experiences of loneliness, coping and creating wellbeing.
Visit pmhnz.org.nz

ANXIETY& DEPRESSION WE ARE NOT ALONE
11am to 4pm, 10 Oct, at Westlake Girls High School
Free celebration to remove the walls. With inspirational speakers, comedy, music, yoga, holistic healing. Visit ww.truenorthcompass.com

REFUGEE RESEARCH
Symposium to improve access to healthcare
Ph 921 9999 ext 7955

LIFEWISE COURSES
Toolbox and parenting courses for Term 4
Ph 818 6834

Family Action Has Moved...

Family Action counselling and Outreach Services have moved to 13 Edsel St, Henderson. Ph 836 1987
Open Mon-Fri 8.30am-5pm

Waitemata DHB Updates

GLOBAL HAND WASHING DAY—15 OCTOBER

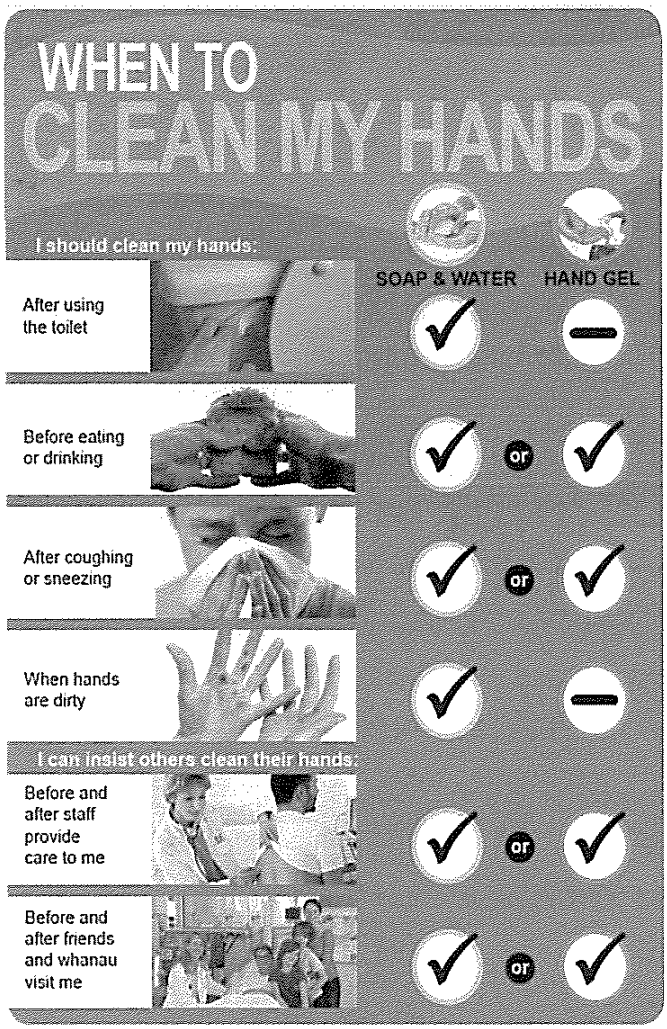
Waitemata District Health Board (DHB) will mark Global Hand Washing Day on 15 October with posters, information leaflets and video stories to remind its patients, their families and its staff about the importance of hand washing in preventing infection.

Global Hand Washing Day is a global advocacy day dedicated to increasing awareness and understanding of the importance of handwashing with soap as an effective and easy way to prevent diseases and save lives.

Hand washing with Soap is Easy Everyone can protect themselves, their families, and their communities through hand washing with soap. It requires few resources—just soap and a small amount of water—yet the benefits are huge.

Handwashing with Soap is Effective

When hand washing with soap is practiced regularly at key times, such as after using the toilet or before contact with food, it can dramatically reduce the risk of diarrhoea and flu, which can cause serious illness and death.



Waitemata DHB Leading the way

I have been a Consumer Representative for the Waitemata District Health Board (WDHB) for some years. It has been an interesting and rewarding role as I have experienced change in attitudes to consumer representation and gradual acceptance of the role at the WDHB.

In the early days of the journey I was looked at with great scepticism, which still happens at times, but the gradual change in attitudes has been rewarding.

Recently I was privileged to attend learning Session 2 of the Adverse Drug Effects of Opioids project in Christchurch. Waitemata DHB should be very proud of itself, as I was the only consumer advocate present, and other DHB's are some way behind in acceptance of the benefits of the role. Some DHB's are struggling to even think about using Consumers. I was asked what I did, was I paid, did I understand the meetings, and did I ever have to give an opinion.

The role of Health Literacy, which WDHB takes so seriously with its editing of patient information brochures, was an unknown area of expertise to other DHB's. So congratulations WDHB for your compassionate consideration of the consumer input and point of view.

Counties Manukau DHB have a consumer advocate who works with me on the First Do no Harm project. However her role is very different to mine, in that she is employed by the DHB to work within the hospital on co-design.

I treasure the role and am very careful to try, to always bring an objective view at meetings. No one wants to hear about my experiences, only how I feel the clients/ patients are feeling or their desires. Once we start choosing or discussing medical people we lose our credibility and set back the work achieved by years.

Waitemata DHB should be very proud of the work it does in the area, as at present it is leading the field. I feel valued and the fact that I am still asked to participate in various activities or hospital projects is significant and indicative of the Waitemata DHB's commitment to consumer work.

As I write this another request has come through today for input on the hospital contact centre. Another example of the continual commitment to the consumer's comfort and ease of access to service Congratulations to Dale Bramley and his team in leading the way.

By Judith Lunny
Consumer Representative

4.2 Health and Safety Performance Report - November 2015

Recommendation:

That the report be received

Prepared by: Margaret Kamphuis (Manager, Occupational Health and Safety) and Fiona McCarthy (Director Human Resources)

1. Purpose of report

The purpose of the Health and Safety report is to provide six weekly reporting of health and safety, performance including compliance, indicators, issues and risks to the Waitemata District Health Board.

2. Highlights of the month:

2.1 Health and Safety Resource Review

The report from this review will be received in late October and we will give the Board a verbal update. We expect any improvement recommendations to be related to system improvement processes, involving many Waitemata DHB processes, not just health, safety and wellbeing. A plan will be developed over December indicating actions and review times.

The resource assessment has indicated that resource is required particularly in the areas of hazardous substances and training. The resignations of a senior nurse to retirement in December and a longstanding relieving nurse to go to another permanent health care position have given opportunity for changes in resource focus.

2.2 Health and Safety Capability Assessment Questionnaire

Gavin Johnson, the Health and Safety Consultant doing the resource review, has developed a Health and Safety Capability Assessment Questionnaire to be given to all new and existing contractors. It is designed to help an organisation pre-qualify or re-qualify for a Waitemata District Health Board Agreement. The questionnaire provides an opportunity for the service provider to sell their scope of work capabilities and the skill competencies required as well as their associated Health and Safety Management System and processes.

The Funder has worked with Gavin to develop a Capability Assessment Questionnaire specifically for all Funder contracts. It requires a provider (or potential provider) to demonstrate its capability and commitment to the management of health and safety by responding to a variety of written questions which include:

- the provider's understanding of its responsibilities under the legislation
- whether the provider is certified or accredited
- whether the provider has a documented health and safety policy
- whether the provider has a health and safety representative
- whether health and safety training has been provided to the provider's employees
- whether the provider has a safety plan and audit programme for the scope of services
- the provider's understanding of the hazards it faces in relation to the provision of the services
- whether the provider has a hazard and risk and accident and incident register and management process
- whether any accidents or incidents have occurred on provider premises or in the provision of similar services by the provider in the previous two years
- whether the provider has professional liability or indemnity insurance

- whether referees can verify the provider's capability and commitment to managing health and safety.

A provider must answer every section of the Capability Assessment, and if a section is considered not applicable, the provider must explain why. The Capability Assessment must be signed off by the Chief Executive (or equivalent) of the Provider organisation.

The Capability Assessment is designed as an initial assessment of a provider's capability and the Funder can use it to obtain additional information prior to awarding or varying or continuing an agreement for services. The intent is that where a provider fails to adhere to the systems and practices it has agreed to via the Capability Assessment, an investigation process will follow (with a focus on the provider taking responsibility for the management of such) and the agreement for services may be varied or terminated accordingly. The Capability Assessment will therefore be useful for the Funder to use as an audit tool throughout the term of the agreement and for incident management.

The Funder is currently refining the first draft of the Capability Assessment and in doing so will "test" it against Auckland and Waitemata DHB's existing provider selection processes, contractual specifications, monitoring, audit and enforcement actions.

The Funder is also working through a plan to stagger the "rollout" of the finalised Capability Assessment across the more than 1000 providers it contracts with across the combined districts. This plan will identify which service areas are at greatest risk of not complying with the requirements of the new legislation. As a priority, the Funder will likely require providers in these "high-risk" areas to carry out a Capability Assessment and execute a variation to existing service agreements to incorporate the Capability Assessment as a quality monitoring and audit tool.

The Funder intends to implement the Capability Assessment as part of all future procurement processes, new service agreements and variations to service agreements going forward. Agreements with service-providers in "low-risk" areas will be varied as they fall due for renewal or otherwise over the coming financial year.

Glossary for Monthly Performance Scorecard

Lost Time Injury Rate	Mathematical calculation that describes the number of lost time injuries per 100 fulltime employees at any given time frame.
Injury Severity Rate	Mathematical calculation that describes the number of lost days experienced as compared to the number of incidents experienced.
Lost time incidents	Any injury claim resulting in lost time.
Serious Harm (Currently Notifiable to Worksafe NZ and will in the new legislation be called "Notifiable Events" and have a wider criteria of reporting to include events not just injury)	The Health and Safety in Employment Act 1992 defines serious harm as: 1. Any of the following conditions that amounts to or results in permanent loss of bodily function, or temporary severe loss of bodily function: respiratory disease, noise-induced hearing loss, neurological disease, cancer, dermatological disease, communicable disease, musculoskeletal disease, illness caused by exposure to infected material, decompression sickness, poisoning, vision impairment, chemical or hot-metal burn of eye, penetrating wound of eye, bone fracture, laceration, crushing. 2. Amputation of body part. 3. Burns requiring referral to a specialist registered medical practitioner or specialist outpatient clinic. 4. Loss of consciousness from lack of oxygen. 5. Loss of consciousness, or acute illness requiring treatment by a registered medical practitioner, from absorption, inhalation or ingestion of any substance. 6. Any harm that causes the person harmed to be hospitalised for a period of 48 hours or more commencing within seven days of the harm's occurrence.
Pre- Employment	Health screening for new employees
Significant Hazard (Instead of a definition all hazards are risk rated to determine how serious they are in the new legislation)	A hazard with the potential to cause serious harm.
Psychosocial Risk	Might be those aspects of the design and management of work and its social and organisational contexts that have the potential for causing psychological or physical harm.
Patients who are away without leave (AWOLs)	Patients under the Mental Health (compulsory Assessment and Treatment) Act 1992, who leave DHB premises without prescribed or approved leave

Health and Safety Scorecard for September 2015

The leading and lagging indicators in the above scorecard are indicative of Health and Safety performance across the organisation.

Using trends and traffic light indicators will emphasise the areas where we are on or progressing towards our targets and when we need to improve. Some of our targets are staged to show improvement over time.

Commentary on Health and Safety indicator variances

Indicator in Amber	Issue	Action
Health and Safety Representative vacancies	There is a high turnover in health and safety representatives but in this case managers are not seeking their re-election in time when someone leaves the position. NB An action from the last Board meeting was about the suggestion to have a health and safety representative co-ordinator. At present occupational health and safety staff provide support to the representatives and in the future as we develop a Governance Health and Safety Committee it is planned to have several lead representatives who will attend the Governance meeting and assist other representatives in their service.	A notice has been sent to all managers to remind them to make sure they have a current health and safety representative. A Governance Health and Safety Committee TOR will be developed by November and reported back to the Board.

3. Key Health and Safety Risks

The table below outlines our key health and safety risks together with commentary on the current status/issues related to that risk and any actions to address issues.

We have added residual risk (the portion of risk that is left after a risk assessment has been conducted) to this table. The actions reported each month are controls in progress and the residual risks from each of these identified risk areas will vary. The DHB has attempted to note the residual risk in the context of the original risk using a traffic light after each risk below.

Legend
↑ increase in progress
→ no change in progress
↓ decrease in progress

Risk	Action	Residual Risk	Progress since last report
Aggression- physical and verbal	Development of training programme for all levels of staff outside Mental Health. Two e Learning proposals going to the Security Review team to be discussed.	Aggression remains the highest accident type.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Blood and Body Fluid Incidents (BBFA)	The BBFA Review statistics indicate that the numbers have increased in the month of September. On analysing further, the increase of nine were needles and splashes and were relatively low risk. There are still teething issues with the new sharp bins use and there are still areas that have been using the incorrect bins for their use. Staff do not all have the safety equipment required, and staff rush so inattention is an issue. These causal factors have been identified in the BBFA interim review which is on hold till the ED cannula use is audited and reviewed by the Director of Nursing.	Remains medium to high. Needles are still the largest contributor.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Hazardous Substances(HSNO)	Dedicated resource continues to increase compliance in the high risk 33 areas. Process for removal of waste chemicals progressing. Audits continuing and compliance is increasing. New chemicals are being addressed through the system. Dangerous Goods Store- plans for Waitakere in progress.	Until all areas are audited and corrective actions undertaken this remains a risk. High risk of chemicals being stored incorrectly at present.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Contractor and Procurement Management Gaps in process of Contract incident Management	OH&S working with Facilities on contractor health and safety reporting and processes. Quality lead to train Project managers from Facilities and the Waitemata 2025 programme in Risk Pro is in progress. Contractor management was part of the OH&S resource review process in August. Implementation of report findings will be discussed with GM Facilities and new Facilities Health and Safety Manager John Casey when it is available (expected week of 19th October) **Case Study:** The DHB had an incident in October when a Crown contractor broke his leg taking files from a moving truck at Karaka Street. Contractor had been in the job for only a month. This incident was investigated by Worksafe. Although this incident occurred on leased land it was our work being carried out and it has highlighted a training need for incident and contract management both of which are underway.	Potential for under-reporting of incidents on Risk Pro. Waitemata DHB staff employing contractors outside of Facilities are still unsure of processes to follow.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Manual and Patient Handling Moving and Handling is one of the top three significant hazards and we are still having too many incidents DHB's have all different Moving and Handling Programmes and ACC/Worksafe are keen to adopt one model to promote.	Audits on safe practice are progressing well at North Shore and Waitakere Hospitals. Moving and Handling was assessed as part of the resource review. The difficulty with getting accurate stats was identified. New data base has been developed and closer liaison with OH&S and the Co-ordinator is now in place. A meeting was held to discuss the possibility of the Waitemata DHB programme being rolled out regionally and then nationally sponsored by ACC and Worksafe. ACC are taking the proposal to their management and if accepted a request will go to SMT for support. An audit of our programme will identify the statistical gaps if this proposal is accepted.	Risk remains until we embed engagement with Health and Safety and Manual Handling early in project Planning and Design stages. Potential for under reporting of moving and handling incidents.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Health and Wellbeing (stress, fatigue, depression)	Training sessions in mindfulness and resilience arranged for four weeks starting in October. Updated healthy workplaces strategy almost complete and circulated for steering group feedback including the unions in October and then to the senior management team in November.	Residual risk remains until we put in place healthy workplace measures and can track progress.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Physical environment (ventilation, lighting, equipment)	An air quality review is underway in the Pupuke Building to assess why three staff have presented to the Occupational Health Physician with respiratory issues Review of ventilation issues is continuing.	Staff could be inadvertently exposed to irritants in the air A number of issues require business cases to be drafted for consideration of capex funding.	↑

Possible diesel fume exposure Ventilation Issues in Radiology reporting (NSH)	Review of possible diesel fume exposure to staff in ED/ADU over a period of April to August is being completed and recommendations finalised. Likely issues for resolution include hazard impact assessment and incident management. When finalised findings will be discussed with the affected service and Facilities and a plan of action with timeframes will be put in place. Worksite assessment done and recommended that an Occupational Hygiene assessment be carried out on air quality in this cramped work space.	The scope and impact of work being done by contractors and overseen by Waitemata DHB staff cannot be understated and so we are aiming for regular impact meetings to include OH&S staff	
Original Risk		Residual Risk	

Risk	**Actions**	**Residual Risk**	**Progress since last report**
Slips, trips and Falls	Each case is discussed with OH&S staff and managers about intervention and reminders at team meetings and H&S meetings. Specifically, when a slip, trip or fall report is made we always check on the person first then ask the manager to investigate. The hazard is also in the electronic hazard register as a generic hazard and managers are reminded about the controls: • During induction staff are given information about this significant hazard, foot wear, and how slips, trips and falls can occur in the workplace. • Mandatory e learning as annual reminder • 3 monthly environmental checklist to capture any issues with water spills or trip hazards All incidents need to be reviewed as to whether the controls they have in place are working.	Remains a moderate risk for numbers and claim costs.	↑
Original Risk		Residual Risk	

Risk	Actions	Residual Risk	Progress since last report
Traffic Management	Traffic plan at Waitakere – Cannon (contractors) are now working well. The loading dock upgrade is now complete.	Low	↑
Original Risk		Residual Risk	

4. Staff Reported Incidents

Glossary

CO - Corporate
CWF - Child, Women and Family Services
ESC - Elective Surgical Centre
HO - Hospital Operations
MEHOP - Medical and Health of the Older Persons Service
MH - Mental Health and Addictions Services
SA - Surgical and ambulatory services

4.1 Staff incidents

The number of reported incidents by staff during the month of September 2015 amounted to 113 (Table 1) down from 149 in August. This is an overall decrease of 22% compared to September 2014.

The rate of staff incidents per discharged patients is 1.45% (based on inpatients only). The rate of staff incidents per FTE is 2.5% (146÷5760x100).

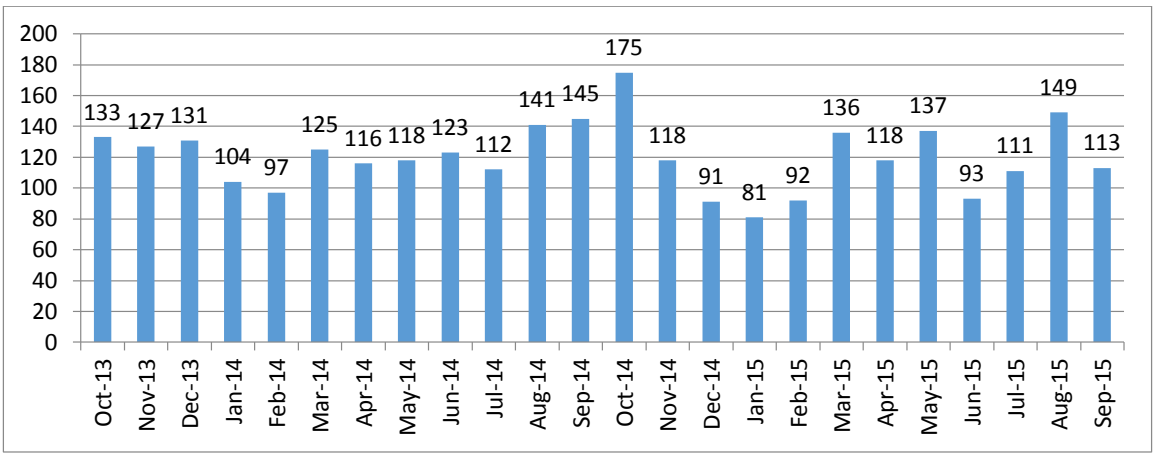


Table 1

Tables 2 and 3 below show that the largest numbers of incidents are physical and verbal assaults followed closely by Slip/Trip Falls and in August Caught/Struck in on or between. Every incident is followed up and managers are required to investigate and take actions. These actions often result in review of patient care. As noted in previous reports, a review of aggression incidents is underway and this review has resulted in a comprehensive training session plan for all levels of staff.

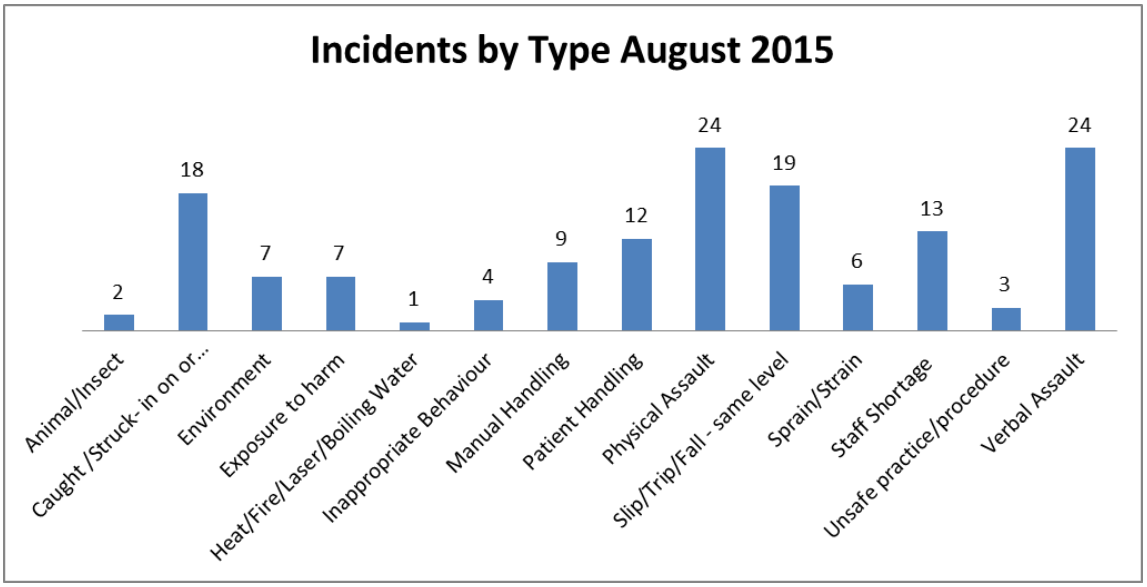


Table 2

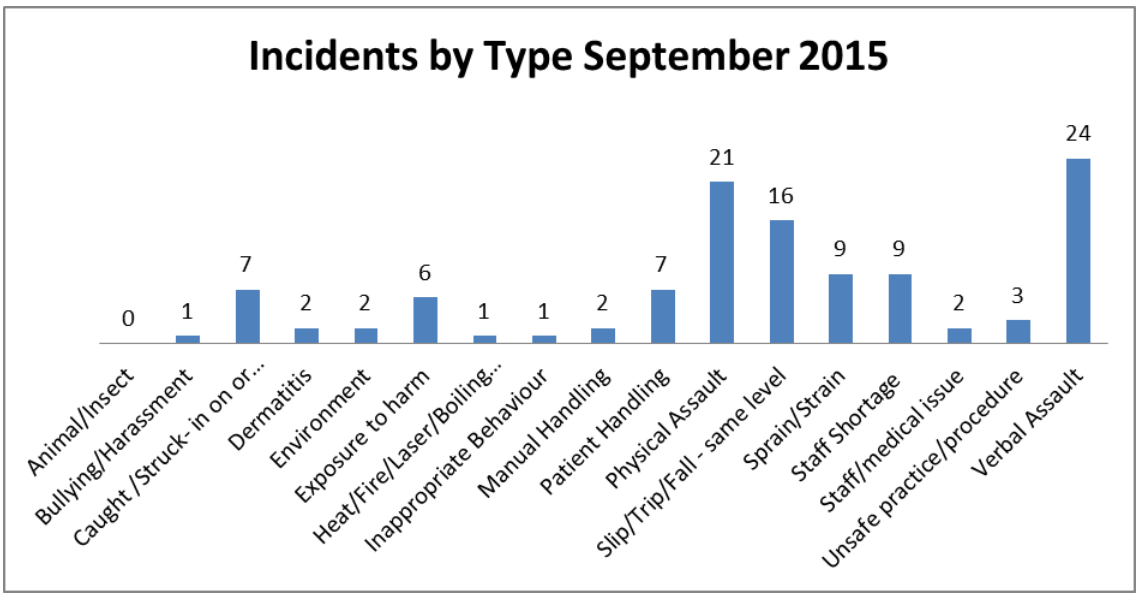


Table 3

4.2 Incidents by Accident Type and Service

Tables 4 and 5 below, indicate that most incidents were caused by aggression, both physical and verbal, and occurred mainly in mental health and MEHOPS - both areas of which are working to reduce the numbers of incidents by auditing existing policy and training programmes.

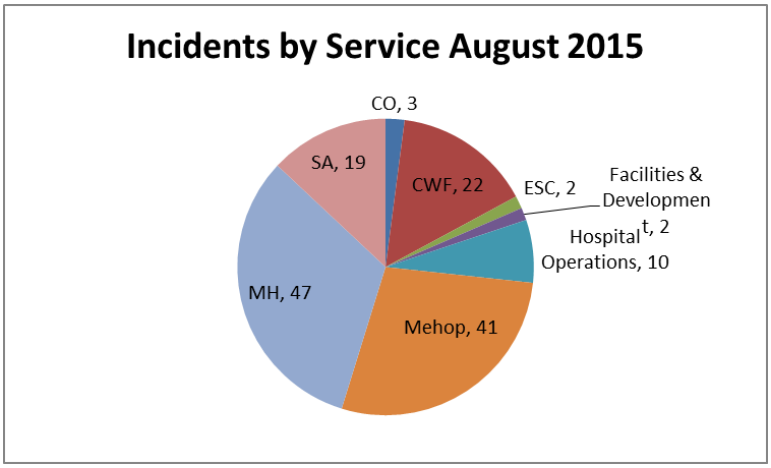


Table 4: Incidents by service August 2015

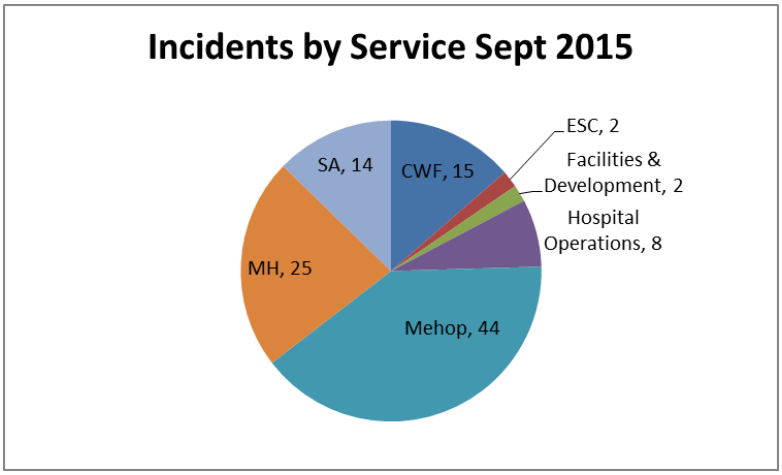


Table 5: Incidents by service September 2015

4.3 Physical Incidents by cause/type –August and September 2015

The tables 6,7,8 and 9 below show us that the physical assault causal type or root cause, changes depending on the types of patients, the numbers and experience of staff and the management of the incident. In both August and September we see that Mental Health patients were the largest source of physical assaults followed closely by generalised aggression.

Each physical assault is assessed by the relevant service and OH&S to determine the harm that has occurred and to see if further treatment is required or an appointment with the occupational health physician is warranted. The hazard causing the assault is also reviewed with the manager of the area to discuss the investigation and actions required.

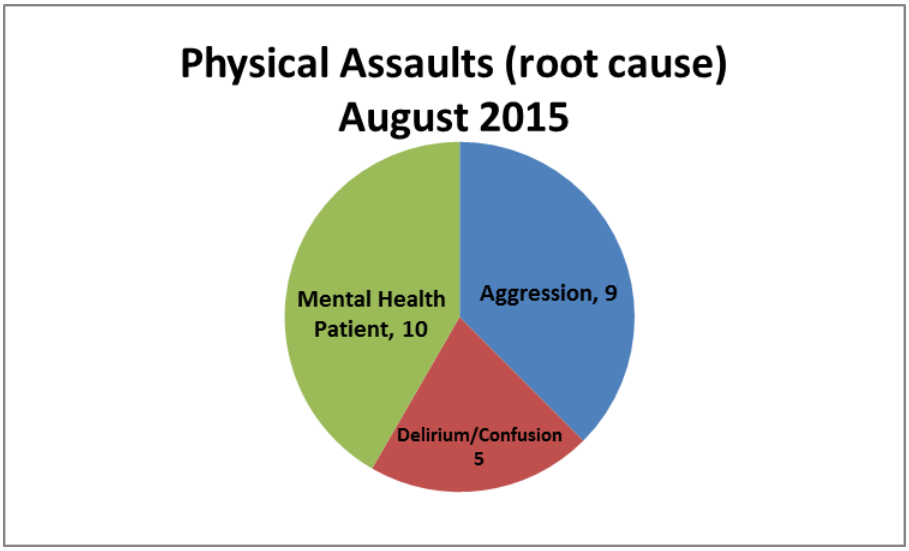


Table 6: Physical assaults root cause August 2015

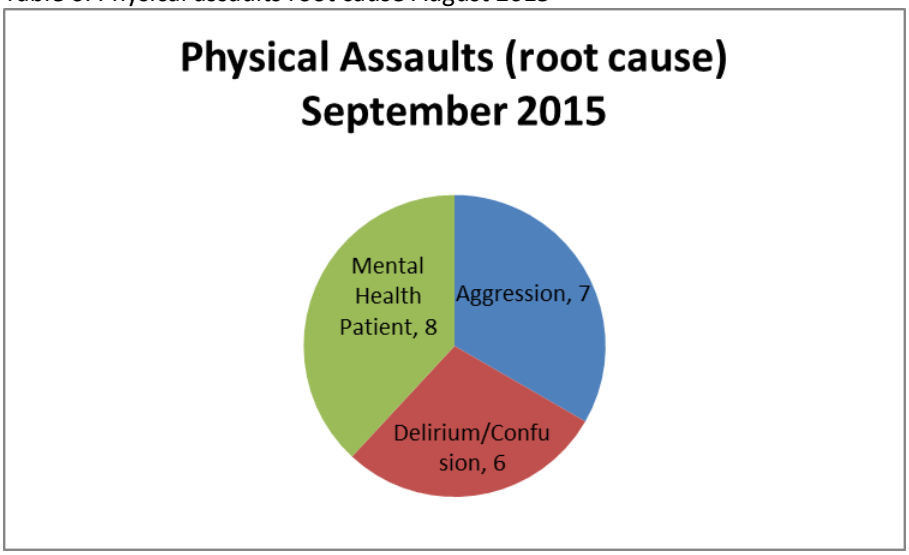


Table 7: Physical assaults root cause September 2015

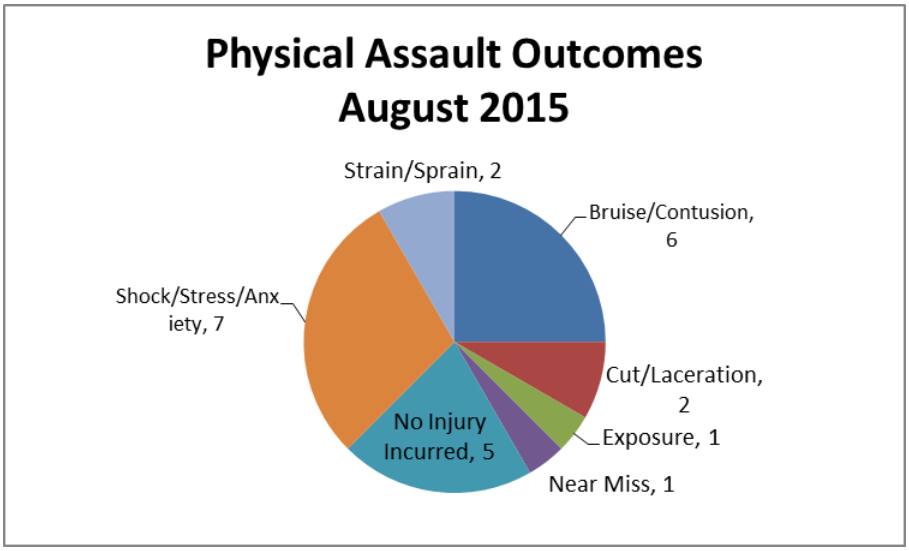


Table 8: Outcomes of physical assault August 2015

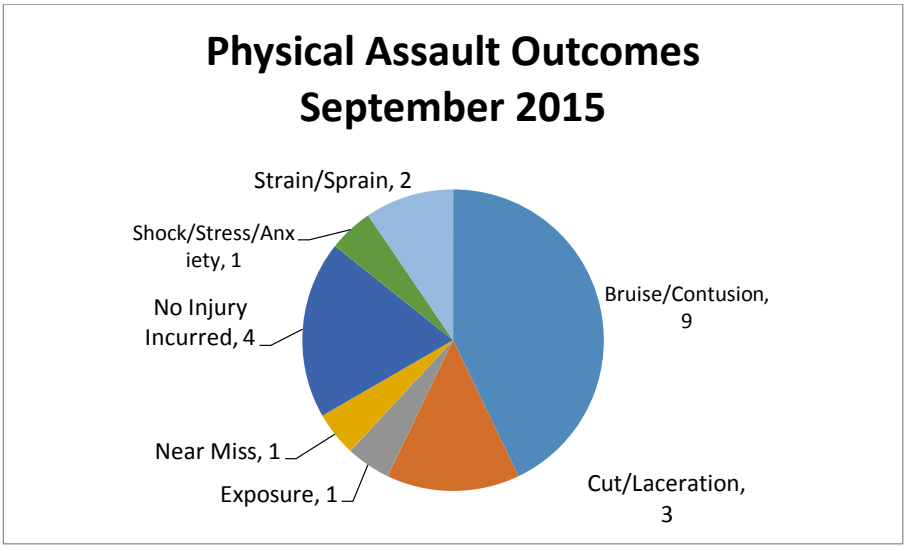


Table 9: Outcomes of physical assault September 2015

5. Serious Harm Incidents

The DHB noted three serious harm incidents with staff in August 2015, and none in September 2015. One of these incidents involved a staff member lacerating her ankle on a door resulting in sutures. The other two incidents were staff members that both fell resulting in fractures. There was one serious harm contractor accident in September however, although the accident occurred on our property, the incident was not caused by any failing of the DHB.

6. Top 3 Accident types that cause harm

Three Main types of incidents and their Management:

1. **Aggression:** Many of the incidents in Mental Health result in bruises, lacerations and shock. Sometimes they are from the same patient and in all situations where harm has occurred there is review for all staff incidents through Serious Incident Review meetings in the service. Each of these reviews identify recommendations that are implemented and monitored to ensure that risk is mitigated (where possible). There is also training and a review of events and trends in Health and Safety meetings across the service and the actions identified for hazard registers. MHOPS as the other areas with significant aggression events also has reviews incidents at weekly team meetings and change practice according to findings when required.
2. Of mention are the increasing numbers of incidents happening at Wilson Centre with older children towards staff. Although training has been in place it has become apparent that it no longer suits the strength of the young adults any more. A joint meeting with Security, Management, OH&S and an outside company who specialises in training in those circumstances, has resulted in a proposal being developed to change the training methods.
3. **Slips, Trips and Falls:** MHOPS and most services have discussed the practice of walking with cellphones and not paying attention to the environment at health and safety meetings and also discussed the rushing up and down stairs where a lot of our falls occur.
4. **Moving and Handling:** Reports do not seem to indicate the full nature of the problem but areas of concern which are passed on to the Moving and Handling Co-ordinator are followed up, with some resulting in more training and some issues are referred to the manager for coaching. Audits are carried out regularly by trained co-ordinators and results fed back to the clinical area.

6.1 Aggression

The September aggression incidents are just over half verbal incidents compared to the physical incidents with most of these occurring in Mental Health Services and MEHOPS. This is a different picture to August when verbal assaults were nearly ¾ of aggression incidents, these occurring almost evenly between MH, MEHOPS and CWF.

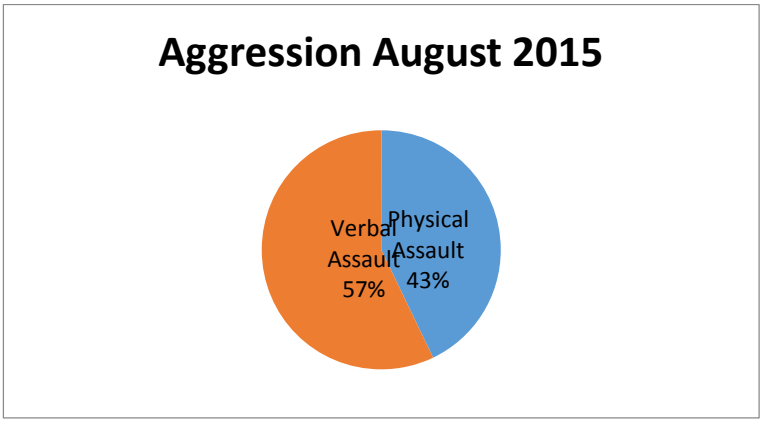


Table 10: division of physical and verbal assault August 2015

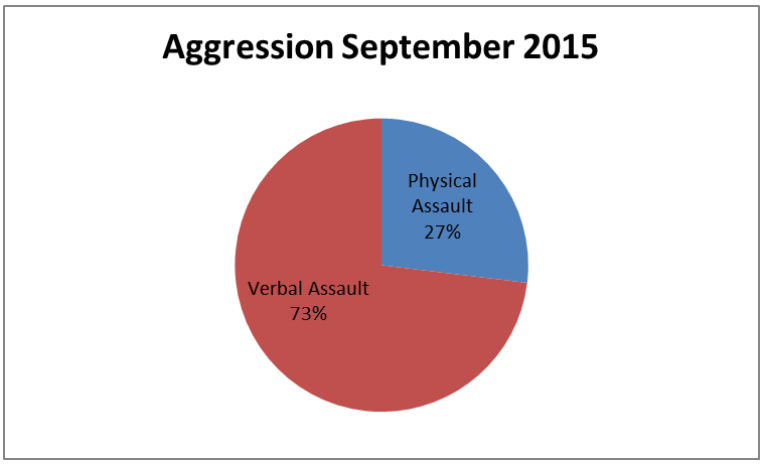


Table 11: division of physical and verbal assault September 2015

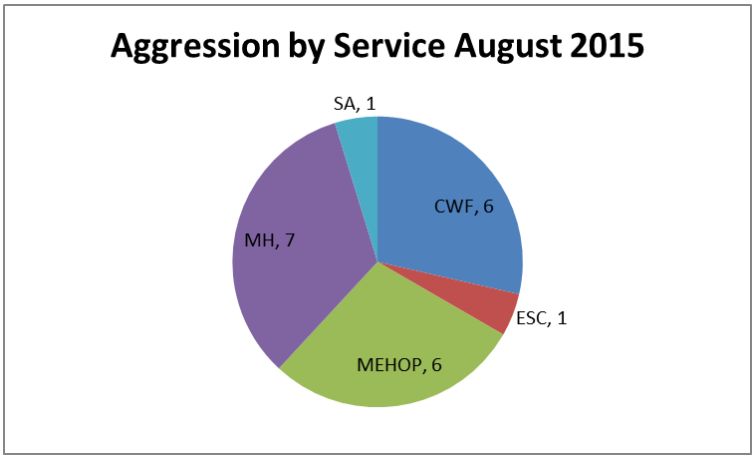


Table 12: Incidents by Service - August

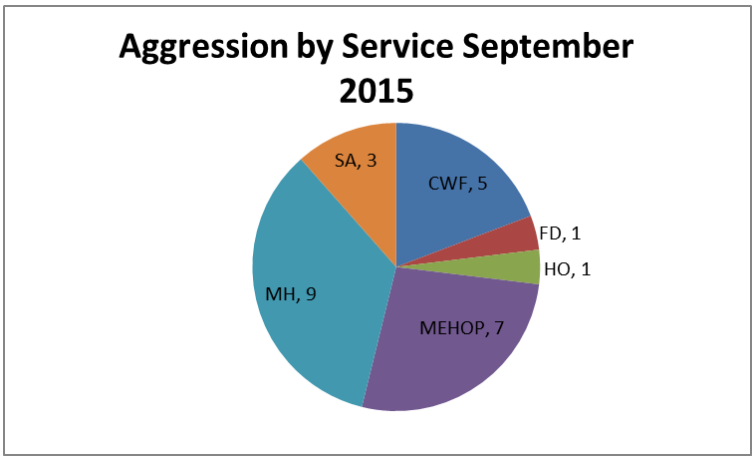


Table 13: Incidents by Service – September

6.2 Slips, trips and falls

Table 14 and 15 show us that SA and MEHOP staff have the most slips, trips and falls and the majority of them are due to inattention.

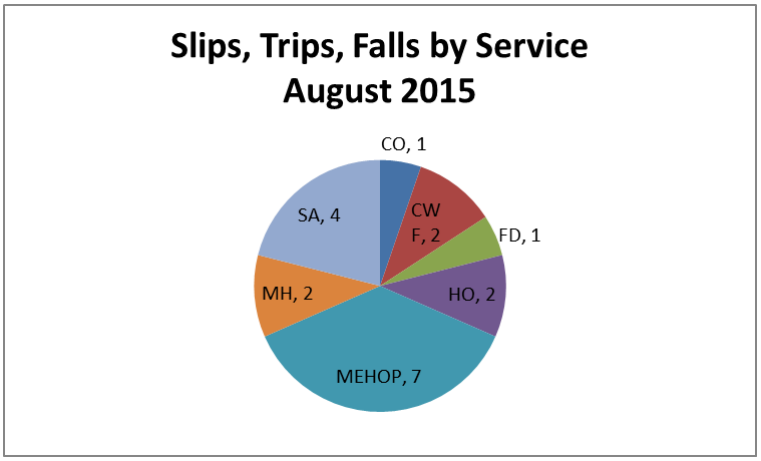


Table 14: Slips trips and falls by Service August 2015

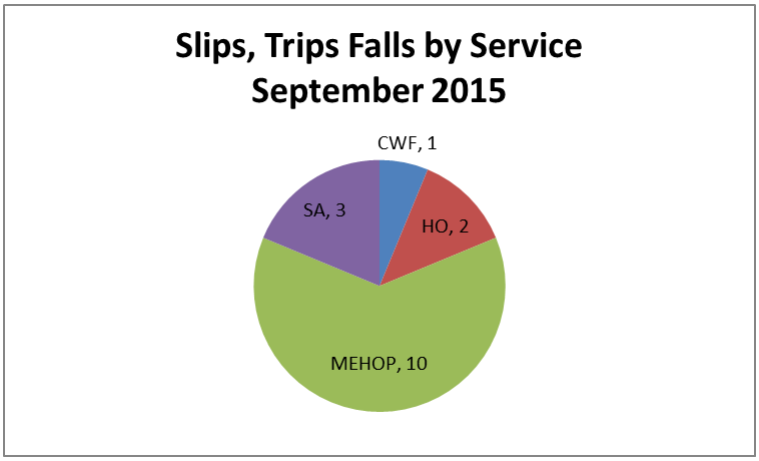


Table 15: Slips trips and falls by Service September 2015

6.3 Patient Handling Incidents

The DHB noted the following patient handling incidents in August and September 2015:

August 2015 – Total 12	Number of incidents
Med Health Older People	3
Mental Health	6
Surgical Ambulatory	3

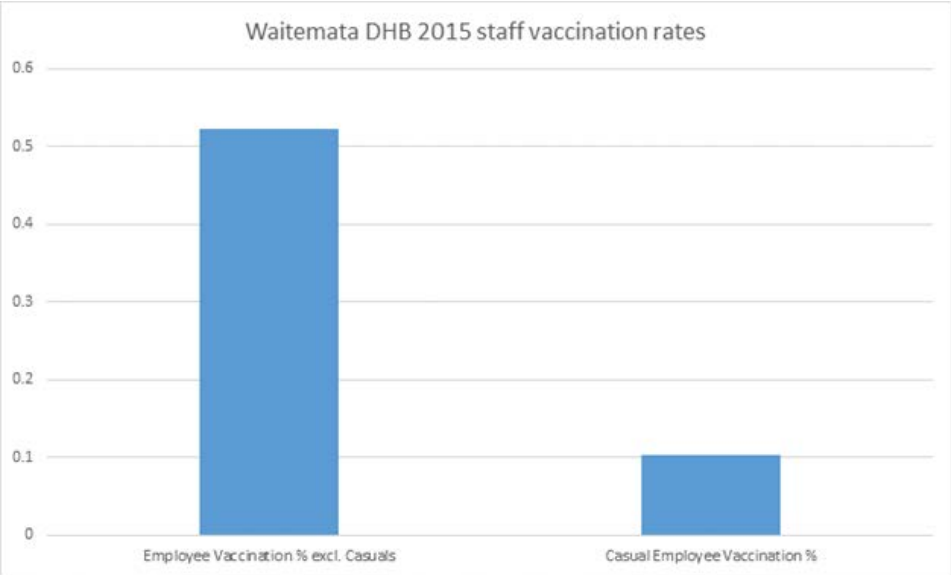
Table 10: Patient handling incidents August 2015

September 2015 – Total 7	Number of incidents
CWF	1
Med Health Older People	4
Mental Health	1
Surgical Ambulatory	1

These tables show us that patient handing incidents are continuing. As noted in Section 3, audits of practise areas are underway to assess risk and training need in all clinical areas. Sometimes training is advised and sometimes an incident is caused by inattention or not using the correct procedure.

7. 2015 Flu vaccinations

As requested by the Board here is a comparison table of employee vaccinations and employee vaccinations including casual staff. In reference to Waikato's 'In team" vaccinators, WDHB did commence this in the 2015 year.



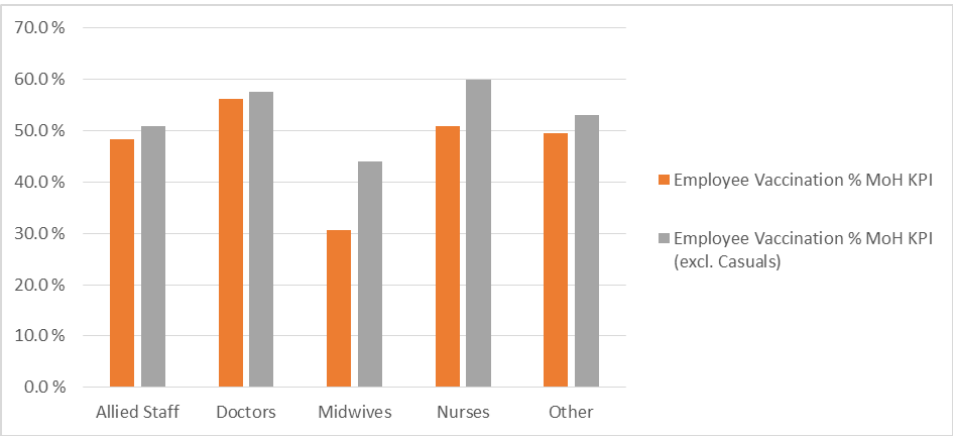


Table 16: Vaccinations by DHB workforce

As already noted the DHB has had an uptake of 55.7% vaccinations. As seen in Table 11 we have had close to or over 50% uptake across all workforces except for Midwives.

8. Safe Way of Working

The Safe Way of Working (SWOW) is Waitemata DHB's safe system of work to enable continuous improvement in health and safety practice. It has been a system for Waitemata DHB since 2001 when the current health and safety manger wrote it as part of a Diploma programme. The system originated from the Alpha Piper Oil Rig disaster in the North Sea where many lives were lost and a safe system of work was set up in response to a review by the British Government. The SWOW is comprised of 14 elements: Policy and Objectives, Organisational Responsibility, Contractors and Service Provider Management, Design Construction and Commissioning, Emergency Planning and Readiness, Hazard Management and Risk Assessment, Hazardous substances Management, Health and Wellbeing Management, HR Management, Plant ,Machinery and Equipment Management, Procurement and Purchasing Management, Incident Management and Accident /Incident investigation, Patient, Visitor and Public Safety Management and Safe Working Procedures/Method Management and Administration Processes and these elements have organisational objectives and an audit tool attached.

Every year the OH&S team develops key result areas for improvement in their planning and each member of the team has objectives set for projects and tasks to achieve. Every Service has a H&S plan based on the 14 elements and sets objectives to suit their part of the business. The GM of the service signs off this plan and it is integrated into their service. Over the years some of the elements have changed to suit the current risks and the system next year will be reviewed to reflect the new H&S at Work Act. When the new Governance H&S Committee is formed in December 2015 it is envisaged that all service plans will come to this group to enable the development of the Key Result Areas as a truly engaged process for the District Health Board.

9. Health and Safety Activities

9.1 Recent Worksafe prosecutions

9.1.1 Quarry operator fined after employee falls from work platform

18 September 2015

A South Island quarry operator has been fined $36,000 and ordered to pay $21,118 in reparations and costs related to the injuries suffered after an employee fell from an elevated work platform on a hammer mill machine, sustaining a fractured skull, concussion, a brain haemorrhage and a bruised hip.

Southern Aggregates Limited was sentenced in the Invercargill District Court yesterday on one charge under the Health and Safety in Employment Act for failing to take all practicable steps to ensure the safety of an employee.

The employee was working on a stationary 'Kumbee' hammer mill machine at the Greenhills Quarry on November 5th 2014 when he fell 1.47m from the machine's work platform. The section of the platform he was working on did not have adequate guard railing, only a chain barrier which hung low and did not provide adequate fall protection.

A WorkSafe investigation revealed that Southern Aggregates Limited had failed to identify all hazards associated with employees working at height and failed to provide adequate guard railing.

WorkSafe's Chief Inspector, Keith Stewart, says that despite the company having a health and safety policy that requires guardrails for all working platforms more than three metres in height, it failed to identify the hazard of working at heights under three metres in adherence with the international standard NZS/AS 1657:1992.

"Working at height comes with obvious risk. Incidents such as these can be prevented if employers make it a priority to identify all hazards before work starts, as well as ensure that the necessary equipment, appropriate precautions and systems of work are set in place," Keith Stewart says.

9.1.2 Supermarket operator ordered to pay $77,300 after worker injured in gate collapse

18 September 2015

The company operating a Dunedin Countdown supermarket where a security gate collapsed on an employee has been fined $44,300 and ordered to pay reparations of $33,000.

As a result of the incident, the employee suffered compression fractures of several vertebrae, leaving him in a brace for 12 weeks, as well as spasms and fractures to the left thumb.

General Distributors Limited, a wholly owned subsidiary of Progressive Enterprises Limited, was sentenced yesterday in the Dunedin District Court on one charge under the Health and Safety in Employment Act for failing to take all practicable steps to ensure the safety of its employee.

The employee was closing the security gate at the supermarket, located at 560 Anderson Bay Road, on 29 November 2014 when the top section of the gate came loose from its runner, and fell towards the employee, pinning him to the ground.

Following the gate's installation in mid-2013, staff identified bolts securing the gate stopper coming loose. The employees attempted to fix the issue on at least three occasions. While a manager was informed that the employees were attempting to repair the gate's stopper, a work order was not formally raised and a maintenance company General Distributors used for repairs was not engaged to fix the gate.

WorkSafe Chief Inspector, Keith Stewart, says the incident is a reminder that working with a structure of that size and weight poses a clear risk to people, especially if the structural integrity is compromised.

"General Distributors Limited should have ensured its repairs and maintenance process was strictly adhered to, and that all repairs were carried out by a qualified party," Keith Stewart says.

9.1.3 KiwiRail ordered to pay $110K after contractor struck by train

18 September 2015

WorkSafe New Zealand says last year's incident where a digger was struck by a train in the central North Island leaving a contractor with serious life-long injuries was entirely preventable.

The family of the contractor, who has spent more than 12 months in hospital, will receive $110,000 in court ordered reparation from KiwiRail Holdings Limited.

The state-owned rail company was sentenced in the Auckland District Court yesterday after it pleaded guilty to charges under sections18 (1)(a), 6 and 50(1)(a) of the Health and Safety in Employment Act 1992.

WorkSafe Chief Inspector, Keith Stewart, says this incident was entirely preventable.

"Every worker has a right to trust that their employer is looking out for their safety and that the necessary safety precautions and systems for managing potential risks are in place.

"Multiple failings by KiwiRail have had a devastating impact on the victim's life. He continues to live with these tragic consequences to this very day," Mr Stewart says.

The incident occurred on 17 June 2014 when the Downer contractor, who was carrying out work for KiwiRail at the time, was working in a digger on the Raurimu Spiral, National Park. KiwiRail track workers gave a north bound goods train permission to drive through the site. The train did not have time to stop once the digger came into view and collided with it.

As a result of the collision the contractor sustained severe traumatic brain injury, and severe chest and lung trauma. His injuries were so extensive that he was placed in an induced coma for three weeks. After 12 months the victim's prognosis for recovery remains very poor and he still requires 24-hour hospital care.

A WorkSafe New Zealand investigation found multiple failures by KiwiRail contributed to the collision, including ineffective communication for all persons on site, poor communication of train movements to workers and failing to provide an effective system that would allow a Rail Protection Officer [RPO] to ensure that all workers were off the tracks before allowing any trains to pass through.

KiwiRail also exposed the KiwiRail train driver to potential serious harm by allowing the train to proceed through the area, resulting in the train colliding with the digger.

4.3 Communications

Recommendation:

That the report be received.

Prepared by: Matthew Rogers (Senior Advisor - External Affairs)

Communications support

The communications team provided advice and support to the following projects/campaigns/issues/events over the last six weeks:

- Hine Ora Ward opening on level 2 NSH – 6 November
- Historical photos selected for small exhibition in NSH foyer
- Waitākere Hospital ED expansion enabling works, construction, traffic and parking
- Health Alliance IT security campaign for September ("Making IT Safe")
- Staff car parking changes (proposed increase in staff and visitor parking charges)
- Ongoing support for transfer from terminal server to Citrix platform project (hA project)
- Front of house refresh at North Shore Hospital
- Waitematā 2025 Core Design Group (designing core design principles for Waitematā 2025 programme)
- Managing online documents for Waitematā Central proposal
- Christmas staff activities
- Patient Information Booklet
- Proof read leaflets, booklets and brochures for various departments
- Corporate printing project to investigate and streamline corporate printing
- Project to rationalise Oracle catalogue (food service items)
- Promotion of the DHB's good performance against health quality and safety markers
- Communications in support of national release of hospital standardised mortality data
- Announcement of single provider for regional pharmaceutical waste management
- Ongoing relationship-building with Waitemata Police and primary health providers
- Further urgent communications to primary care regarding hospital occupancy levels
- Media response to findings released by Health and Disability Commissioner
- Preparation of Annual Report foreword
- Update of Waitemata DHB overview document
- Preparation for final presentation in the 2015 CEO Lecture Series
- Waitakere Hospital volunteer shop relocation
- Media relations for wahakura weaving event organised by maternity services
- Liaising with media regarding hospital occupancy levels
- Management of requests to film on DHB sites
- Communications planning for upcoming capital works projects
- Intranet staff training
- On-going social media and issues management
- Immunisation campaign support
- DHB-primary care communications collaboration programme
- Proof read leaflets, booklets and brochures for various departments
- Responses to 'Dear Dale' email questions and comments from staff
- Event photography
- Fortnightly CEO recognition award communications

Publications

The communications team published the following during the last six weeks:

- Design planning and preparation for the Annual Report.
- Aug-Sep-Oct *Healthlines* to be published early October, with 24 pages.
- Fortnightly CEO Message
- Weekly national health targets updated and communicated.
- Designed a number of publications including medical conference posters and patient-facing information leaflets for various services.

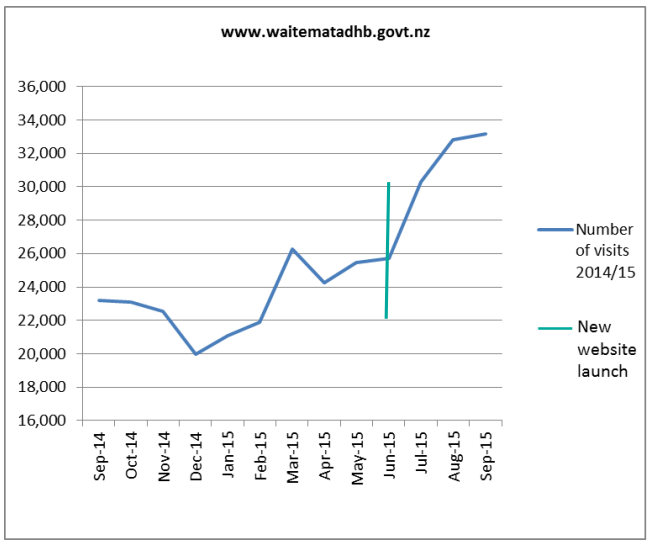
Waitemata DHB, Careers and Awhina websites – Google Analytics Statistics

Waitemata DHB website

Number of visits	**September 2015**
Total visits to this site	33,162
New Zealand	30,976
Australia	661
United States	346
United Kingdom	262

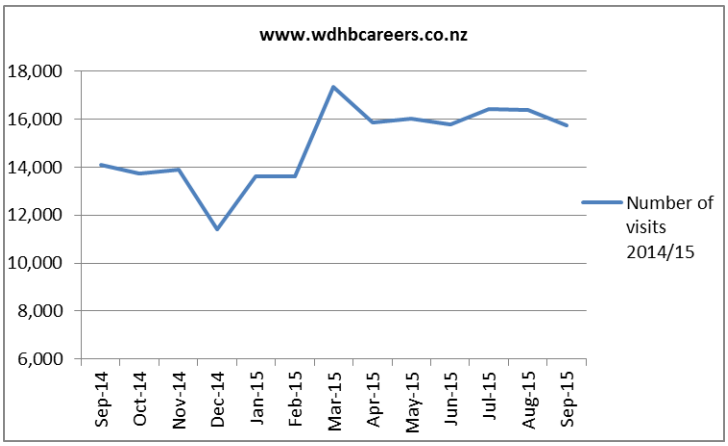
Top areas	**September 2015**
Home page	14,261
Waitemata DHB staff page	11,747
North Shore Hospital	6,957
Waitakere Hospital	3,891
Contact us	3,059

Traffic sources	**September 2015**
Search traffic	71%
Direct traffic	20%
Referral traffic	9%



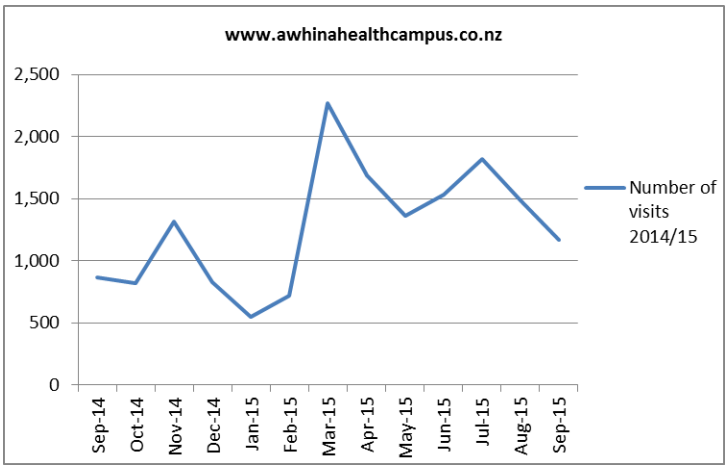
Careers website

Number of visits	September 2015
Total visits to this site	15,739
New Zealand	13,655
Australia	440
Canada	313
United States	232
United Kingdom	218



Awhina Health Campus website

Number of visits	September 2015
Total visits to this site	1,169
New Zealand	991
United States	39
Not set	34
Netherlands	21



Social media

Waitemata DHB Facebook page likes: 1257
Waitemata DHB Facebook star rating: 4.3/5

OIAs received

A total of 36 new OIA requests were received between 8 September and 20 October:

- A. King (Labour) - status and cost of major building projects
- A. Marett (Labour) - mental health bed capacity, presentations, admissions, waiting times and referrals
- A. Marett (Labour) - hospital car parking arrangements
- A. Marett (Labour) - details of any financial sustainability programme
- L. Hopkins (NZ First) - osteoporosis case load and funding
- A. King (Labour) - colonoscopy treatment times
- A. King (Labour) - implementation of Pregnancy and Parenting Information and Education programme
- C. Whitlock (Thrive Teen Parent Support Trust) - names of providers for Pregnancy and Parenting Information and Education programme
- W. Stewart (OrbitProtect) - cost of intensive care treatment to non-eligible patients
- A. Vailahi (NZ First) - income from parking charges and fines
- R. Bollard (Parliamentary Research Service) - use of myelograms
- P. Wakefield (NZ First) - funding for home support services for older people
- R. Thomas (Green Party) - preparation for the effects of climate change
- A. Marett (Labour) - rheumatic fever correspondence and reports
- A. Marett (Labour) - payments to HBL and NZ Partnerships Ltd
- G. Gulbransen - copy of contract for opioid treatment services in primary care
- A. Vailahi (NZ First) - details of any reviews performed in the 2008 calendar year
- A. Marett (Labour) - details of patients on suspend list and declined for surgery by specialty
- S. Burgess (TVNZ) - amount spent on legal actions regarding the sale of alcohol
- C. Wallbridge - updated Glen Innes school dental data
- L. Hopkins (NZ First) - mental health peer support resourcing
- P. Wakefield (NZ First) - funding for rural health services
- A. Marett (Labour) - documents concerning payroll review
- M. Hakaraia (Te Hononga) - family violence intervention programme tender
- A. Marett (Labour) - latest hip and knee waiting list report
- J. Hekau - data on hospitalisation rates of older adults
- J. Williams (Taxpayers' Union) - Sky TV subscriptions
- A. Marett (Labour) - spending on mental health services
- A. Marett (Labour) - elective day procedures performed since 2011
- A. Marett (Labour) - middle ear inflammation and cochlear implant surgeries for under-17s
- M. Dobbyn (NZRDA) - annual leave balances of each individual RMO
- J. Williams (Taxpayers' Union) - process for ensuring political neutrality
- A. Marett (Labour) - correspondence re supervision issues for medical staff and accreditation of clinical departments
- A.D. Tait - information on prospective male-to-female sexual reassignment surgery providers
- A. O'Brien - correspondence around any plans to build a fence around new mental health unit
- M. Dobbyn (NZRDA) - positions offered to overseas-trained RMOs

Media Clippings - 8 September to 20 October 2015

Positive +
Neutral 0
Negative -

Dominion Post	
Parking fees add $15m to hospital coffers	0
ACC rejects claims for sterilisation failures	0
Worrying trend for mental health patients : Labour	0
Taxpayers foot the bill for foreign patients	0

North Shore Times /North Harbour News	
Electronic Change	+
Drinks Ban	+
DHB Leader in quality and safety	+

North Harbour News	
Cliff Rescue	0

NZ Doctor	
GP unimpressed by PHO's fiddling	0
Better late than never with free under-13s care in Auckland	0
Waiheke Islands outdated health services get scrutiny by DHB	0
Leadership in DHBs – Not bad, could do better, or OMG	0
Next big thing? Tool for decisions evaluated for Auckland GPs	0
Bowel screening won't get fast forward despite damning statistics	0
Auckland practices get access to pathways clinical support tool	+
Epic poetry and heroic deeds?	0
Auckland e-referrals get fresh head of steam and new target	0

NZ Herald/Herald on Sunday/NZherald.co.nz/Weekend Herald	
Hub a turnaround for small town	0
He was trying to get to his moko	0
RAVE – North Shore Hospital A&E	+
RAVE – North Shore Hospital surgical care	+
Dying man left waiting for months	-

NZ Nursing Review	
NETP : a decade of growth	+

Otago Daily Times	
Man found, later dies	0

Sunday Star Times	
Life and death	0

Waikato Times	
GP, board failed	-

Western Leader	
More Ops for patients	+
We Truly love him	+
Quicker Service	+
Speed and Carnage	0
Top Healthcare	+
New Volunteer shop	+

TOTAL:

Positive +	**12**
Neutral 0	**18**
Negative -	**2**
Total items	**32**

5.1 Ethnicity Data Audit Toolkit – Final Report

Recommendation

That the Board:

a) Receive this report which sets out highlights of the Ethnicity Data Audit Toolkit (EDAT) implementation, on the recommendation of the Chair of Manawa Ora.

b) Note the Māori Health Gain Team's achievement on this piece of work.

c) Endorse the Māori Health Gain Team's recommendations for ongoing work in this area to improve the quality of ethnicity data in primary care.

Prepared by: Aroha Haggie (Manager Māori Health Gain), Dr Karen Bartholomew (Public Health Physician) and Micol Salvetto (Programme Manager, EDAT)
Endorsed by: Dr Debbie Holdsworth (Director Funding)

Glossary

BPAC	-	Best Practice Advocacy Centre
DHB	-	District Health Board
EDAT	-	Ethnicity Data Audit Toolkit
RFP	-	Request for Proposal
GP	-	General Practice
MoH	-	Ministry of Health
NES	-	National Enrolment Service
PHO	-	Primary Health Organisation
PMS	-	Practice Management System
The Protocols	-	Ethnicity Data Protocols for the Health and Disability Sector

1. Executive Summary

The Māori Health Gain Team (in collaboration with primary care colleagues and Primary Health Organisations (PHOs)) has successfully completed implementation of the Primary Care Ethnicity Data Audit Toolkit (EDAT) in 98% of general practices in the Auckland and Waitemata DHB area.

This paper presents the highlights of the EDAT work and is provided to the Board on the recommendation of the Chair of Manawa Ora – the Maori Health Gain Advisory Committee.

This paper recommends the Board note the Māori Health Gain Team's achievement in this area, in particular:

- We are the first in the country to have achieved EDAT implementation and have exceeded the 95% implementation target set by the Ministry of Health
- EDAT implementation is a key Māori Health Plan deliverable and means by which we can monitor and act on health disparities
- We have developed and led EDAT training across five other DHBs and in a variety of primary care settings

- We have shared resources and learnings with Counties Manukau DHB as they implement EDAT
- We have been able to provide reporting and technical commentary on EDAT issues to the Ministry of Health (MoH), and the MoH has acknowledged the quick and highly successful implementation of EDAT in the Auckland and Waitemata regions.

Finally, this paper recommends the Board endorse the Māori Health Gain Team's ongoing work to improve the quality of ethnicity data in primary care, as set out in the ten recommendations in paragraph 8 below.

2. Background

EDAT is an audit package developed by the MoH to provide a baseline assessment of the quality of ethnicity data in primary care and practice level information on consequent quality improvement activities. Waitemata DHB and Waitemata PHO collaborated to pilot EDAT in 2012, prompting the Ministry of Health to refine the EDAT before its release in 2013. Implementation began in Auckland and Waitemata DHBs in 2014.

Participating general practices implemented all three stages of the EDAT tool:

- **Stage one**: assesses whether the practice is collecting, recording and outputting ethnicity data in compliance with the Ethnicity Data Protocols (usually completed by practice manager).
- **Stage two**: assesses staff understanding of, and current processes for, the collection and recording of ethnicity data. This is also aimed at identifying specific staff training needs (staff surveys completed then marked by the practice manager).
- **Stage three**: assesses the quality of ethnicity data currently held in the PMS against a 'fresh' collection of self-identified patient ethnicity using the supplied audit form for 100 patients. This gives practices an indication of the quality of data, however it may not be representative of their enrolled practice population.

3. Implementation

Implementation was carried out jointly by the Māori Health Gain and Primary Care Teams in Auckland and Waitemata DHBs, in close collaboration with our five PHOs. EDAT toolkit packs were developed by the EDAT team in collaboration with the Best Practice Advocacy Centre (BPAC), and these were delivered to PHO liaison staff at train-the-trainer workshops. The EDAT team provided extensive training to PHO liaison and practice nurse advisor staff as part of the EDAT implementation. Some PHOs, after receiving the training, requested the training to be repeated to general practice staff directly. Communicating directly with the practices provided a useful insight into implementation issues, question interpretation, use of EDAT and current ethnicity data collection and recording practices. Regular implementation progress reports were provided to the Ministry of Health on technical details around issues identified, coding and PMS product variations including unavailability of the 2009 codeset change from the Ethnicity Data Protocols.

The Māori Health Gain team considered EDAT to be a useful opportunity to quantify ethnic specific misclassification in a primary care population and so requested the assistance of our PHO and general practices partners in providing anonymised evidence of completion of all three stages and a further audit of a sub-sample of stage three results from each PHO (2,800; 12% of participating practices). The EDAT team reviewed and entered the results of the stage three forms on site at the

PHO or practice. No identifiable data was transferred. The results were coded and their congruence assessed, and an estimate of the level of misclassification in the sample was calculated.

Once PHOs completed EDAT implementation, exit interviews took place to discuss implementation procedures, PHO specific outcome of the audit and feasibility of quality improvement activities proposed by the DHB.

4. EDAT overall findings

All three stages of EDAT have been implemented in 235 general practices across Auckland DHB and Waitemata DHBs, corresponding to 98% implementation rate. The Ministry of Health has acknowledged the rapid and highly successful implementation of EDAT in our region, and has provided this feedback to our PHOs directly.

Table 1. EDAT implementation by PHO in Auckland DHB and Waitemata DHB

PHOs	Number of practices	EDAT implemented	Implementation %
Alliance Health Plus	25	25	100%
Auckland	24	24	100%
National Hauora Coalition	16	16	100%
Procare	130	126	97%
WPHO	44	44	100%
Totals	**239**	**235**	98%

Stage one: System compliance checklist
This was a relatively well received stage that practice administrators completed. Stage one is well designed and supports practices to clearly identify whether further attention is needed in the data collection stage or in the data recording stage. The last part of the checklist asks general practices about methods of data extraction. PHOs perform this function rather than general practices. This part of the score is therefore not meaningful in terms of data quality.

Stage two: Staff Survey
This was very well received by practice staff, managers and PHO representatives. Two PHOs in particular found the information emerging from this survey very useful and have decided to include this in their 'yellow folders' or welcome pack for new staff. One large PHO who was able to access all these results found the survey a useful tool to identify and support practices in need of training or support.

Stage three: Recollect 100 patients ethnicity
The EDAT tool stage three assesses the level of 'match' between the freshly collected ethnicity from 100 consecutive patients and the ethnicity recorded on the practice management system. The tool provides the following categories of assessment of ethnicity data quality at a practice level, which are linked to recommended quality improvement activities within the tool. For example practices with poor ethnicity data quality are recommended to recollect ethnicity data for their enrolled population over time.

- **High data quality:** Match score above 90%
- **Moderate data quality:** Match score between 70% and 90%
- **Poor data quality:** Match score below 70%.

Table 2 shows that all PHOs had a wide range of practice data quality, with 35% of practices overall scoring a high data quality assessment. Twenty two practices (10%) were assessed as having poor ethnicity data quality. More than half of the practices scored moderate quality. The level of partial-matches and total mismatches has not been reported here.

Table 2. Summary results of Stage 3 EDAT; ethnicity data quality assessment by PHO

PHO	Number of practices who completed EDAT	PHO Median score	PHO score range	Data Quality EDAT Assessment		
				High	Moderate	Poor
				Number (%) of practices scoring ≥ 90%	Number (%) of practices scoring 70-90%	Number (%) practices scoring ≤70%
Alliance Health Plus	25	87%	62-100%	9 (36%)	14 (56%)	2 (8%)
Auckland	24	86%	67-100%	9 (48%)	14 (58%)	1 (4%)
NHC	16	85%	72-100%	7 (44%)	9 (56%)	0 (0%)
Procare	126	85%	37-100%	43 (34%)	70 (56%)	13 (10%)
Waitemata	44	84%	42-100%	15 (34%)	23 (52%)	6 (14%)
Totals	**235**			**83 (35%)**	**130 (55%)**	**22 (10%)**

It is important to note that the summary results regarding data quality are influenced by system level issues rather than issues at a general practice level. This is discussed in paragraph 5 below.

The EDAT tool does not state that where a partial match or total mismatch was identified in stage three the PMS should be updated with the correct ethnicity. The EDAT project team considered PMS updating to be a central component of data quality improvement and established this as a standard part of EDAT implementation through all training and train-the trainer forums, support to practice liaisons and practices. The EDAT tool does not require practices to share or keep their stage three results. Where the results of stage three were shared for the sub-analysis they were only shared as de-identified data. We were therefore not able to audit identifiable data to determine whether PMS changes were made by comparing the result with the PHO enrolment register. However, exit interviews and discussions with practice staff demonstrate that PHOs were supportive of PMS updating through EDAT and that PMS changes were made. For mismatches some practices scanned the forms into the PMS or asked patients to sign the audit forms to support making PMS changes related to enrolment (a MoH requirement). The changes to the EDAT tool that would support this key quality improvement component have been provided to the Ministry of Health and to other DHBs currently implementing EDAT.

5. Key issues identified

The Māori Health Gain Team was able to compile a detailed register of key issues that affect ethnicity data quality, based on the overall experience of implementing EDAT and working closely

with primary care, PHOs and some Practice Management Systems (PMS) vendors. The issues can be grouped in three broad groups:

5.1 System issues

The primary cause of data quality issues were attributable to systems and process issues, largely related to the IT PMS vendor structure or processes. Even where frontline administrative staff, who collect and record ethnicity in most practices, are trained and aware of the Ethnicity Data Protocols they are fundamentally unable to record the data correctly if the PMS system they utilise does not contain the correct codes or facilitate easy and correct recording.

The different PMS all had a different interface for recording ethnicity data. Key PMS issues are:

- None of the PMS complied with the Ethnicity Data Protocols
- Incorrect ethnicity codes were available in some PMS
- Limited numbers of ethnicity codes were available in some PMS
- Practices had been allowed to make up their own ethnicity codes (often in response to patient request or confusion. These created codes are often invalidated when PHOs extract data resulting in missing data in PHO enrolment registers. This practice has now been stopped but data quality has already been compromised)
- Some PMS automatically pre-populate ethnicity for family members on enrolment (eg children); this is not supported by the Ethnicity Data Protocols
- The largest PMS has a front demographic screen requiring input of a 'principle ethnicity' (asking the patient to choose; this is not supported by the Ethnicity Data Protocols)
- The largest PMS then has optional second and third ethnicities on the third demographic tab. Most frontline administrative staff were not aware that this tab existed and only input the first ethnicity on the enrolment form. As the enrolment forms use the census question this often is New Zealand European, even when a prioritised ethnicity is listed on the form.
- No PMS included the new 2009 codeset at the time of EDAT. This has subsequently been made available in the two largest PMS systems after the conclusion of EDAT, although the PMS vendor transfer process has some issues noted.

5.2 Training and education

The second largest cause of ethnicity data quality issues was the education and training gap for frontline administrative staff, PHO liaison staff and wider PHO staff. There was evidence of lack of knowledge about the importance of ethnicity data, the uses of ethnicity data (outside of the practice setting), the correct form to collect data, the existence of the Ethnicity Data Protocols, and the nature of the codes for recording data. No frontline administrative staff were familiar with the Ethnicity Protocols and its minimum requirements.

Implementation of EDAT has met some of these training and education needs, however a more systematic and sustainable national approach needs to be developed to address this fundamental problem. The EDAT project team has proposed developing an electronic based training module on ethnicity data collection and recording for primary care, designed for the end user and developed to be short and focused.

5.3 Compliance issues

System and training comprised the majority of the reasons for ethnicity data quality issues. There was however also evidence of non-compliance with the Ethnicity Data Protocols of a more systematic nature. These were mostly found to be grounded in concern for patients – either respecting their ethnic identification choices or ensuring the provision of care. There was note made

of deliberate changing of enrolment forms for this purpose. These issues are being followed up by the relevant PHOs.

- Not all practices have the correct ethnicity question (census 2001 in the correct order) in their enrolment forms. The MoH example enrolment form is not used in some practices, even if it is the policy of their PHOs.
- Systematic misclassification of the Fijian-Indian ethnic group. According to the Protocols this group is coded as *43_Indian* (which codes up to Asian), however they are systematically coded as Fijian (*36_Fijian* which codes up to Pacific; which has funding implications and is likely to contribute to the overcount of Pacific peoples). Some practices have amended their enrolment forms so that there are two additional boxes for Fijian and Indian separately; so that when both are coded the Pacific code is prioritised above the Indian code as per the Protocols. Some patients and practice staff express a strong preference for this group to be coded as Pacific. There have also been changes to the definition of these groups in Fiji which has resulted in some confusion.
- Systematic misclassification of some Southest Asian groups (eg Pakistani, Bangladeshi and Sri Lankan; currently coded as *44_Other Asian*). The 44 code does not currently trigger an early (and funded) Cardiovascular Disease Risk Assessment, even though these groups are likely at high risk. There is evidence that some practices code these groups as a funded code in order to provide this care.

6. Sub-analysis

Table 3 presents the high level findings from the stage three sub-analysis (recollect of ethnicity from 100 consecutive patients and comparison with PMS records) of 2,800 (12%) patient forms. Of the 241 Māori patients 21 were misclassified in the PMS. Misclassification may result in under or over counting. In this sub-analysis a 9% undercount of Māori patients in the PMS was found. For Pacific there was a 5% over-reporting, and for Asian a 4% undercount.

Table 3. Quantification of ethnic specific misclassification for EDAT Stage 3 sub-analysis of 2,800 patients recollected ethnicity compared with PMS ethnicity

Ethnic group	Mismatch calculation			Misclassification interpretation
	Patients with mismatched ethnicity	Total number of patients	Misclassification %	
Māori	21	241	8.7%	Under reporting
Pacific	19	400	4.8%	Over reporting
Asian	26	586	4.4%	Under reporting

Although there was a reasonable sample size for the sub-analysis, greater statistical confidence in the ethnic specific misclassification analysis can be generated by a larger sample size. This is being conducted in Counties Manukau DHB, where the Māori Health Gain Team are assisting with EDAT implementation and have requested all practices contribute anonymised stage three results.

Misclassification impacts many primary care indicators, for example the currently reported Māori-non Māori current gap in PHO enrolment of 10-15% would reduce to 0-5% if this level of misclassification is accurate. Although not required by the EDAT tool, during EDAT training Auckland DHB and Waitemata DHB PHOs, practice liaison staff and practices were advised to update their PMS where mismatched ethnicities were identified. This is an important data quality improvement

activity that could be supported further by modification of the EDAT tool which has been recommended to the Ministry of Health.

An issue noted in EDAT implementation and the sub-analysis was the high level of use of the codes *'54_Other'* and *'99_Ethnicity not stated'*. These two codes are meant to be used rarely, however there is evidence of frontline staff using the codes when they encounter 'difficult' ethnicities rather than selecting the correct code. There is also evidence that 99 codes have been applied to patients that do have an ethnicity recorded in their PMS. This may have been done in error or possibly to assist with the ethnicity data completeness requirement of the previous PHO Performance Programme (less than 2% missing ethnicities). Completeness has been a focus of ethnicity data previously, rather than ethnicity data quality. The previous Cervical Screening Ethnicity Data Audit determined that both 54 and 99 codes contain high levels of misclassified Māori patients.

From the exit interviews, discussions with practices and practice advisors and the sub-analysis of the 2,800 stage three forms (12% of the sample) it was found that EDAT tool level of match assessment did not provide a full picture of the quality of ethnicity data. Specifically:

- Lack of prioritised ethnicities are not counted in the EDAT tool as a high level of mismatch - for example where a patient records on their enrolment form or EDAT form New Zealand European and Māori and only New Zealand European is captured on the PMS. This issue is a significant cause of ethnic specific misclassification. The level of match assessment in EDAT is therefore likely to be an overestimate.
- There were issues with the interpretation of the tool where some match assignment was not done correctly. This may have been due to confusion about the tool, resistance to the level of match score – for example, where New Zealand European and Other European were a mismatch and the practice did not agree.

7. Discussion

EDAT provides a baseline assessment of ethnicity data quality and highlights for practices and PHOs some areas of potential quality improvement activity. Some quality improvement, as noted in the pilot evaluation report, can be generated from EDAT participation learnings (eg staff training needs), however significant and sustained ethnicity data quality improvement will require systematic data quality improvement initiatives.

Achievement of data quality improvement needs to address both the fundamental systems issues (to move these from barriers to enablers of high quality data recording) and the training issues. As well as the broad changes, EDAT has assessed a small number of practices (10%) having poor data quality. These practices require individual practice support, a quality improvement plan and repeat of EDAT. As noted EDAT does not provide a complete assessment of data quality for example the issue of missing prioritised ethnicities is not weighted as a key data quality issue in the tool itself. EDAT poor quality assessment, and adjunctive assessment such as 54 and 99 coding, may be used synergistically to identify a subset of practices that PHOs (assisted by the EDAT project team) can work more intensively with on quality improvement activities.

In addition to the systems and training issues the current Ethnicity Data Protocols minimum standard of Level 2 ethnicity does creates confusion where frontline administrative staff have to look up ethnicities in a table at their highest code (Level 4) and then work out their Level 2 code to input. Valuable granularity of information is lost in this process (for example Korean is classified as

44_Other Asian) and it creates confusion and the potential for errors. The Māori Health Gain Team have observed the Level 4 coding in Auckland City Hospital and consider that Level 4 recording of data, although substantially more codes (200+ compared to 20+) is simpler for those entering the data. A standardised and intuitive Level 4 electronic recording system (interface) designed with end users could reduce the confusion and provide a platform for systematic training (including e-learning modules) and data quality improvement. The Ministry of Health has some work underway with PMS vendors which include ethnicity collection, and the Māori Health Gain Team has contributed to this work.

8. Recommendations

The Māori Health Gain Team makes ten recommendations for its ongoing work in this area to improve the quality of ethnicity data in primary care:

PHOs

1. Support all practices to undertake the quality improvement activities as indicated by individual practice EDAT results, including updating mismatched ethnicities identified in stage three.
2. Provide direct support (including training) to practices identified as having poor quality ethnicity data to undertake the quality improvement activities as indicated EDAT.
3. Provide direct support (including training) to practices identified as having high levels of 54 or 99 coding which may also indicate poor ethnicity data quality.

Auckland DHB and Waitemata DHB EDAT Team

4. Conduct a 54 and 99 code audit with PHOs and practices as an adjunctive assessment of ethnicity data quality.
5. Work with the Ministry of Health on technical issues identified through EDAT.
6. Continue to work with PMS vendors to ensure that the 2009 codeset change is robustly implemented.

Ministry of Health

7. Modify the EDAT tool to provide instructions to practices to update their PMS where partial and total mismatched ethnicities are identified.
8. Update the Ethnicity Data Protocols to provide guidance on the range of technical issues identified through EDAT, and to consider implementation of Level 4 ethnicity data collection and recording.
9. Consider the development of a standardised user interface (developed with end users) which could be a requirement of all PMS vendors.
10. Development of primary care training (designed to meet the needs of frontline administrative staff) on ethnicity data, for example an e-learning module.

5.2 Health Services Plan

Recommendation:

That the report be received and the Board:

a) **Notes the feedback process and progress to date.**
b) **Considers the early draft Health Services Plan in detail.**
c) **Provides feedback on the early draft health services plan including the recommended next steps.**

Prepared by: Simon Bowen (Director of Health Outcomes) and Cath Cronin (Director Hospital Services)

Glossary

GM - General Manager of Division
HOD - Head of Division
HSP - Health Services Plan
NGO - Non-government organisation
PHO - Primary Health Organisation
SMO - Senior Medical Officer

1. Executive Summary

This paper is being presented as an early draft to allow the Board time for input and feedback. Waitemata 2025 as described in the Health Services Plan fundamentally sees a transformation of the current healthcare system. Driven by changing demographics, cost pressures, technological developments and consumer preferences, the healthcare system of the future must reconfigure to operative effectively within these parameters. The result is a patient and Whānau driven health system, focused on maximising health outcomes and improving patient experience with the need to be constantly learning and agile to meet the changing population demands.

2. Driver of the Plan

The development of a Health Services Plan (HSP) for 2025 has been underway over the last four months. The HSP brings together population demand requirements and other health service changes, particularly those caused by new technologies and models of care, to provide a view on how Waitemata DHB's key services will alter over the next 10 years. Central to this process is to extend Waitemata DHB's promise, purpose, priorities, and values into the context of future challenges, and to translate them into concrete plans for action.

3. Phase one of the HSP and next steps

The development of a comprehensive health services plan for the Waitemata DHB population is intended to be undertaken over a number of phases. The first phase of the health service plan describes the hospital and community services provided by the DHB, so includes some community pathways, but is not a complete community plan. The second phase is to engage with community partners to develop a primary and community services plan and the following phase is to work with our regional colleagues to develop and agree a regional service plan.

4. Key Findings

1. The largest single challenge facing Waitemata is the substantial increase in demand on services and facilities that are currently fully utilised and requiring refurbishment.
2. The Waitemata DHB population will increase to at least 700,000 by 2025 with increases in quality care for an increasing frail and elderly population.
3. There are numerous challenges to be overcome to provide best care for everyone while living within our means by 2025.
4. If we maintain status quo we will have a deficit of 330 beds by 2025.
5. By 2025 patients and whanau will be at the centre of the health system and healthcare and technological advances will bring to the fore practices of personalised and preventative care, data driven decision making, and mobile health.
6. North Shore Hospital will achieve a delineation model of a level 3-4 hospital to a 4-5 hospital and be aa comprehensive secondary service provider with some dedicated sub-specialties to meet the needs of the catchment population who require most services delivered locally, aligned with a regional plan that optimises resources. Particular attention needs to be focussed on the clinical support infrastructure required to provide care in a comprehensive care setting.
7. Waitakere will experience a major shift in service delivery to meet the population needs of the West with the development of a delineation model from level 2-3 to level 3 hospital. This enhances a focus on provision of some elective and acute surgical services, increased hours of access for adult acute medical and surgical services. Waitakere will also increase paediatric ambulatory/same day access and become the Waitemata hub for child, women and family services along with development of interspecialty relationships – HDU, anaesthetics and clinical support infrastructure.
8. A focus for both hospitals is to identify which services do not need to be provided in a hospital and explore alternative care models, both ambulatory and inpatient in the community and home setting.

5. Next Steps

The Health Services Plan sets out an ongoing programme of work to be delivered by 2025. Key next steps include:

1. **Further health services planning:** Develop the next two phases of the HSP with primary/community services and with our regional colleagues. Incorporate the HSP into the annual planning to frame the DHB's performance expectation and ensure deliverables are agreed to meet the HSP direction.
2. **Detailed operational planning:** Prioritisation, resourcing, and timeline for implementation of identified immediate term initiatives.
3. **Master site planning and facilities development:** Taking forward the services, facilities, and model of care changes identified in this Plan to develop a master site plan and associated business cases and submissions of capital plans.
4. **Quality Improvement:** Coordinating and prioritising the large number of potential model of care and patient cohort changes identified in this Plan.

5. **Sustainability and financial stream:** Addressing the potential sustainability gap identified in the Plan by extending the ongoing Provider Sustainability Programme and ensuring appropriate measures, KPIs, and financial benefits are in place (led jointly by CFO / Funder). Engage with regional DHBs to agree a regional plan that ensures the Northern region resources are optimised so that provision of care to the population meets clinical performance indicators and is delivered within allocated funding streams.
6. **Technology strategy and roadmap:** With technology set to play an essential role over the next 10 years, a clear roadmap for investment and roll out is required to make sure model of care changes and facilities developments are appropriately enabled.
7. **Workforce planning and talent strategy:** A number of model of care changes are contingent on the implementation of new roles and refocusing of current ones, requiring a detailed strategy to ensure the right people and roles exist to enable Waitemata 2025.

Waitemata
District Health Board
Best Care for Everyone

Waitemata District Health Board

Health Services Plan 2015

DRAFT

V9.3

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Executive Summary - Overview of Plan

Waitemata 2025 fundamentally sees a transformation of the current healthcare system. Driven by changing demographics, cost pressures, technological developments and consumer preferences, the healthcare system of the future must reconfigure to operative effectively within these parameters. The result is a patient and Whānau driven health system, focused on maximising health outcomes and improving patient experience with the need to be constantly learning and agile to meet the changing population demands.

Scope & purpose of this Health Services Plan (HSP)

The purpose of this Health Services Plan is to set the overall direction for health services for the next ten years to 2025 and specify a course of action to deliver WDHBs promise, purpose, priorities and values. Due to urgent capacity concerns and facility development needs within current hospital services, the first stage of the HSP covers the hospital and community service provided by WDHB. The interface with broader community and primary care services is considered and will form the second stage of the HSP along with collaboration with our regional colleagues.

The objective of the HSP is not only to articulate a strategy and plan but to initiate a continuous process of engaging with the Clinical Services and health partners both in the community and in the region. The HSP has been developed with the involvement of 39 service level workshops, which were attended by Clinical Leaders, Medical, Nursing, Allied Health and Managerial staff, as well as two open day feedback sessions – one with over 70 Clinical Directors and Operational Managers invited and another with 61 stakeholders including representation from PHOs, a range of NGOs, other agencies such as the Ministry of Social Development, Ministry of Education, Accident Compensation Corporation, the Police, and consumer representatives.

Section 1 Summary: Waitemata health services

Waitemata District Health Board (WDHB) is the largest New Zealand DHB by population with 587,862 and serves the communities of North Shore, Waitakere and Rodney with populations of 333,192, 254,670, and 54,879 respectively. This population is made up of approximately 63% European/NZ, 20% Asian, 9.7% Māori, and 7.3% Pacific peoples.

WDHB provides 60 specialty services across 6 Divisions, employs over 6,800 people, and conducted 109,829 inpatient discharges and 634,619 outpatient attendances in 2014/15. WDHB provides acute, ambulatory, and community services primarily from the North Shore and Waitakere hospitals as well as the Mason Clinic for Mental Health and over 30 community sites throughout the district. WDHB also contracts with two Primary Health Organisations (PHOs), multiple community providers and NGO partners. WDHB is the National Provider for Hyperbaric medicine, the Northern Region provider for Mental Health Forensics, Child Disability, and Child Dental services, and the Metro Auckland provider of Alcohol and Drug Services.

Section 2: Waitemata's key challenges over the next 10 years

The single largest challenge facing Waitemata over the next 10 years is the substantial increase in demand on facilities and services that are currently fully utilised and requiring refurbishment. In the next ten years WDHB will serve a population of approximately 700,000, with noteworthy increases in patient cohorts that are a challenge for current services to provide effective and best practice care (e.g. Frail and elderly, Stroke, and Diabetes). WDHB has recognised this growth and has invested in recent years in services, facilities, culture, innovation and clinical leadership. This investment is evidenced in WDHB's population enjoying the highest life expectancy in NZ, the lowest hospital standardised mortality rates nationally, and some of the lowest

mortality rates for key diseases. However, WDHB will still face considerable challenges to deliver 'best care for everyone' while living within its means to 2025.

WDHB's Key Challenges to 2025

Challenge: The population will increase to nearly 700,000 by 2025 combined with growth in demand this will place considerable pressure on heavily utilised services and facilities

Illustration: Between 2008 and 2015, acute admissions to hospital increased by 19% and ED attendances have increased by almost 50% for Waitemata residents, after adjusting for population ageing and growth

85+

Challenge: The growth in the older adult population in particular is of strategic concern to WDHB.

Illustration: 65+ population will double over the next 20 years and 85+ predicted to increase by 150%. Older people have greater need for health services and are estimated to occupy about 45% of beds currently

Challenge: changing prevalence and better management of chronic disease including Cancer, Cardiovascular diseases, Stroke, Diabetes, Obesity, and Mental ill-health.

Illustration: Cancer causes 31% of all deaths in Waitemata with the most significant being lung breast and colorectal cancers. Approximately 30-35% of cancers are caused by modifiable risk factors

Challenge: The financial challenge facing the broader health sector and WDHB is substantial, with the current trajectory of cost growth estimated to far outweigh revenue growth by 2025

Illustration: Current trajectory modelling indicates a greater than $200m deficit by 2025

Challenge: Effectiveness and standardised, evidenced based care, particularly for treatment of complex, chronic, and highly comorbid patients.

Illustration: Approximately 31,000 bedday savings identified for MHOP, SAS and CWF across both hospitals in the most recent Health Round Table benchmarking

Challenge: Shift in demographics over the next ten years impact patient characteristics

Illustration: The Asian demographic is predicted to grow from 20% of the total population currently to 26% in 2025

Challenge: Particular populations in WDHB's catchment continue to experience inequalities in health outcomes

Illustration: One in five potentially avoidable deaths occurring among Māori and Pacific populations, and have 8 years lower life expectancy

Challenge: Global megatrends are redefining health care from one which is characterised by institutional care provided to the sick to one focused on the broader management of health

Illustration: Practices of preventative care, data driven decision making, mobile health and personalises healthcare become standard

Delivery Challenges across all services:

- A responsive but split physical footprint
- Limited operational insight from data and technology
- Funding & budgets not aligned to outcomes
- Facilities that are aging and largely not fit for purpose
- Lack of ability to flex to match ebbs and flows in demand
- Largely siloed services planning
- Meeting requirements as a large training site

Base case or status quo modelling (i.e. current trajectory with no major changes) reinforces the above challenges and indicates a bed deficit of 330 across all services and growth in outpatient volumes by 33%, and planned decisionmaking on financials required by 2025.

This HSP is intended as a strategy and overarching plan to addressing the above challenges and gaps.

Section 3: Waitemata 2025

A central aspect of this HSP is to translate WDHB's promise, purpose, priorities, and values into the context of future challenges and into an overarching strategic direction. Waitemata 2025 has been developed with executive and services input, and while requiring continuing refinement represents the 'end-state' that this HSP seeks to develop a plan towards achieving.

The key features of this are outlined below and detailed at length in the main body of the report.

Waitemata 2025 - A patient and Whānau centred health system that is working together to achieve the best outcomes for WDHB's population

Patient and Whānau self care

Patients and their Whānau are at the heart of this system and would make much greater use of technology to access health information, connect with others who are experiencing similar health challenges and engage in preventative care.

Primary

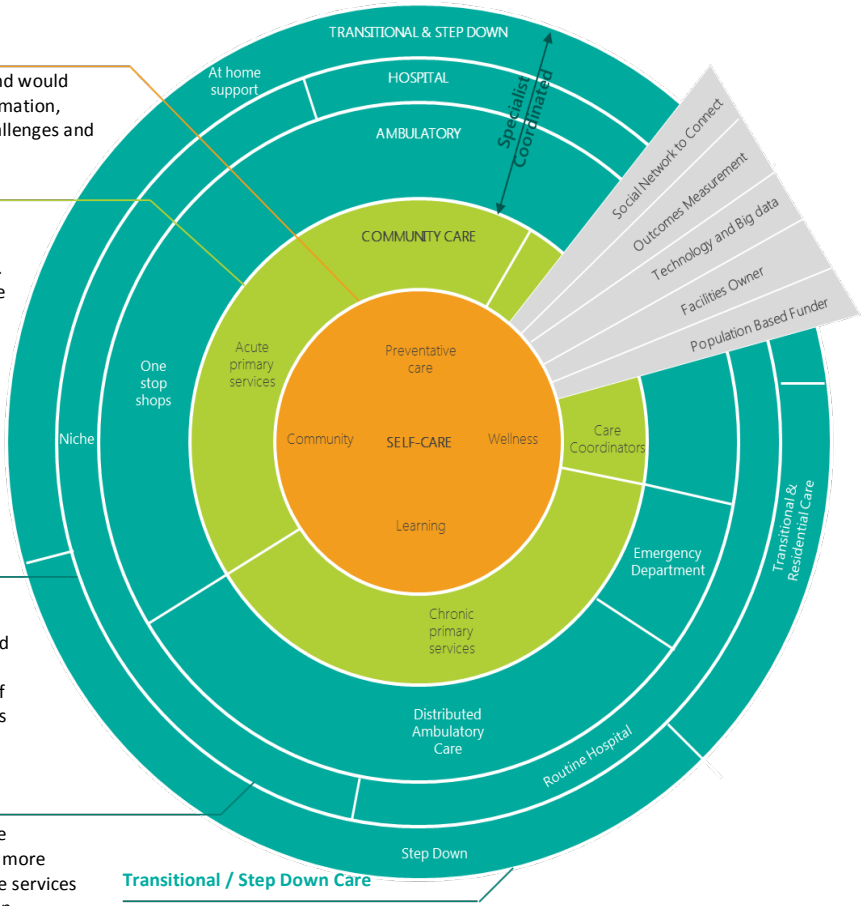
A multidisciplinary team coordinated by general practitioners works at this level. Services such as radiology, physio, and pharmacy are co-located or virtually connected. General practitioners have extended skills, performing more traditional secondary services, and can access support from specialists to inform treatment decisions. Primary care services will focus on what matters most and supporting patients to achieve the best possible outcomes, particularly in relation to management of chronic disease. There will be greater focus on multiagency and inter-sectoral coordination. Care Coordinators or Orchestrators are available for at risk, complex, and high needs patients, helping to navigate the system and ensuring broader health and social needs are met.

Ambulatory

The first of three specialist orchestrated levels of care. This level includes emergency medicine and 'one stop shops' established around particular conditions with diagnostic and treatment capability in a single site. These services may be accessed physically or through virtual methods. This level of care will refer to intervention or community care services as appropriate and support primary care providers to manage the patient back to a state of self-care.

Hospital

Hospital services would increasingly focus on more intensive specialist services. Hospital intervention will be shorter and more acute, with concentration of specialisation and assets. These services may be offered at a DHB or on a regional level, depending on volumes or level of specialisation required.
Where more intensive interventions are required, as decided by the specialist, services will be organised by 'routine' and 'niche' patient flows. Routine services are high volume relatively standardised interventions whereas niche services require a greater degree of expertise or support (e.g. cancer treatment for frail and elderly patient with mental health disease).



Transitional / Step Down Care

Following intervention, the specialist will orchestrate any community based care to support the transition back to a state of self-care. These include facilities offering rehabilitation, transitional and aged care as well as at home care services.

Section 4: Summarised goals and actions

Working towards Waitemata 2025 and translating the purpose, values, priorities and outcomes into concrete action, the focus of the HSP is on the following goals and actions across three major time envelopes – immediate, medium, and longer term.

1. Improve aging services and facilities to required standards, and develop appropriate bed capacity services to meet the needs of a 700,000 catchment

Critical to Waitemata's growth over the next 10 years is a consideration of what services should be grown and developed across its major sites to meet the needs of a 700,000 population catchment by 2025.

To systematically complete this exercise, the New Zealand Ministry of Health Role Delineation Model (NZ RDM) from 2010 was utilised as a base for identification of key services requiring change if Waitemata 2025 is to be met. The outputs of this analysis are tested in Section 4 of the main report against key findings from the Service Workshops, Senior Management Team (SMT) retreat and Inter-District Flow (IDF) activity analysis.

As noted in the 'Next Steps' of this HSP these require further validation within WDHB and across regional partners.

North Shore Development

North Shore Hospital will continue to develop as a comprehensive secondary service provider with some dedicated sub-specialties to meet the needs of the catchment population who require most services delivered locally, aligned with a regional plan that optimises resources. Particular attention needs to be focussed on the clinical support infrastructure required to provide care in a comprehensive care setting.

The two major shifts identified with services and tested through the RDM framework from a level 3-4 hospital to a level 4-5 hospital are:

1. **General Medicine:** High growth in general medicine volumes and particularly in geriatric centred care indicates the potential need for at least one facility in the WDHB catchment that provides high volume, complex general care, which translates under the RDM to a level 5 General Medicine service. This was reinforced in workshop sessions and current service development plans. **Key changes associated with this are:**
    a. Development of related Medical specialties rosters, clinical scope, and access to support General Medicine development, including Palliative Care, Renal , Respiratory, and Cardiology
    b. Development of a Cardiothoracic service has been indicated as not likely to be feasible, therefore access to this (as well as access to a level 5 medical and radiation oncology service) would be needed for a level 5 General Medicine service
2. **Surgical Specialities:** Development of surgical services at North Shore to a 'high volume and medium patient complexity level', which translates under the RDM to consideration of level 4 Surgical Specialties The NZ RDM is relatively weak in its description of requirements for Advanced Interventional Radiology and this will need to be included in future service planning. The RDM specifies a range of significant changes associated with this development, including: patient characteristics and complexity, hours of access, and inter-speciality relationships / support services

Waitakere Development

Waitakere will experience a major shift in service delivery to meet the population needs of the West with a focus on provision of some elective and acute surgical services, increased hours of access for adult acute medical and surgical services. Waitakere will also increase paediatric ambulatory/same day access and

become the Waitemata hub for child, women and family services along with development of interspecialty relationships – HDU, anaesthetics and clinical support infrastructure.

Potential developments on the Waitakere hospital site are centred on two major shifts:

1. **Surgical Specialities:** Development of surgical services at Waitakere to 'Specialist services providing acute and elective care to communities', which translates under the RDM to consideration of a shift form level 2 to level 3 Surgical Specialties The RDM specifies a range of significant changes associated with this development, including: patient characteristics and complexity, hours of access, and inter-speciality relationships / support services

2. **Paediatric Specialities:** Development of Paediatric services at Waitakere to a 'Specialist services providing acute and elective care to communities', which translates under the RDM to consideration of level 3 Paediatric Surgery. The focus is to provide a level of care appropriate for the population. The RDM specifies a range of significant changes associated with this development, including: patient characteristics and complexity, hours of access, and inter-speciality relationships / support services.

Bed Requirement Summary:

Division	2016 planned beds[1]	Expected 2026 bed gap[15]	Beds under Refurbishment	Bed reduction from model of care change	*Additional beds from potential 2026 service development*	Total potential 2026 bed gap
MHOP	308	134 *(159 with 25 under development)*	*TBD*	33	33	**134**
SAS	191	75	*TBD*	15	51	**111**
Older Adults	111	59	*TBD*	-	-	**59**
MH	86	41	*TBD*	-	-	**41**
Mason Clinic	113	- *(8 with 8 under development)*	*TBD*	-	-	**-**
CWF	110	21	*TBD*	8	17	**30**
Total:	**919**	**330** *(363 with 33 under development)*	*TBD*	**56**	**101**	**375**

[1] Taken from the modelling conducted by Ratana Walker with any beds currently under development noted

2. Continue to innovate to maximise WDHB's assets, people, and technology, and bring best practice and evidenced based models of care to improve patient experience, quality of care, and outcomes achieved

Workshops and consultations during the HSP focused on understanding what key challenges services saw over the next 10 years and what innovations and changes were anticipated to meet these challenges. Throughout these workshops the responses were collated and mapped across the timeframes (Immediate, Medium and Longer term) and theme type (Workforce, Services & Facilities, Technology, and Funding & Incentives). These are documented in detail in Section 3 of the main report, but the key changes across the immediate and medium to longer term are laid out below.

Immediate Term Changes:

The immediate term is about effectiveness and quality of care. In simple terms the focus in this period is on improving outcomes of patients once they enter the existing footprint of services, with a number of initiatives targeted at decreasing lengths of stay, standardising care through clear pathways, consolidating the Outcomes Quality Framework , and moving patients more quickly between appropriate settings of care through early supported discharge and transitional models.

Model of care changes:

- **Efficiency in delivery:** Extend ongoing Provider Sustainability work to review and improve utilisation, turnaround times, rosters, and workforce mix across services
- **Step down and transitional care:** Completing ongoing work towards developing early supported discharge models, transitional units, and appropriate alternative care settings for key patient cohorts (i.e. Stroke)
- **Pathways, liaisons, and interdependent services:** Agree a standard approach/methodology for pathway development, implementation and evaluation. Develop ability to track and review growth in liaison demands, and review model of care implementation process to include impacts on other services and support services
- **Patient cohorts identified and plans established:** Leverage ongoing Bohmer streams (i.e. Frail Elderly, Cancer) to establish key patient cohorts and develop cross-specialty care plans and pathways
- **Primary and community care:** Initial transition of 'routine' procedures for Medicine and Surgery to Primary and Community partners (i.e. ongoing Skin GPSI model), and continue to develop community team models and presence for Mental Health and Child, Women, and Family
- **Outpatient / ambulatory review**: Review traditional three month follow-up model and shift towards virtual, telehealth, group, and self-booking models where appropriate to improve patient outcomes and reduce numbers. Conduct a similar review of current FSA appointments and link with one-stop shop, multidisciplinary models being implemented (i.e. ADU / ED front door model)
- **Self-care and preventative care:** Invest in and support patient education, remote monitoring and data collection for highest impact population groups (e.g. patients with cardiovascular disease and diabetes)
- **Evidenced based care:** Continue to respond to and implement innovations and new models of care
- **Quality & outcomes focus:** Consolidate and embed quality outcomes measures within divisions and reporting

Workforce:

- **Workforce sizing and mix:** Review of inpatient presence and SMO / registrar sizing for high volume and growth specialities, as well as FTE time required to meet training requirements and to provide consult liaisons and support, and resource mix for key services (i.e. ED)
- **Rostering improvements / reviews:** Review rosters, lists, and booking process for identified efficiencies

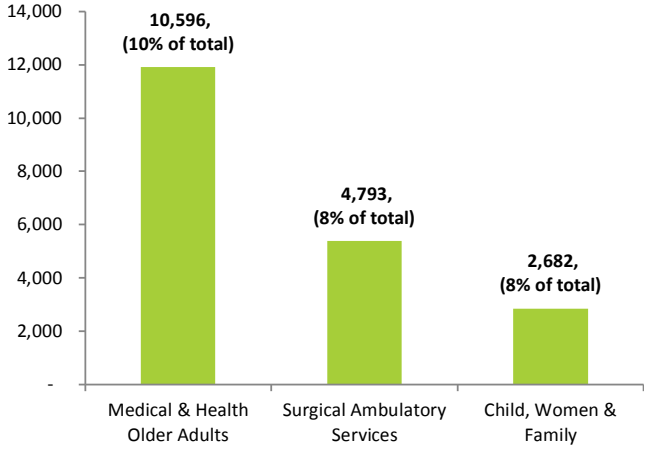
- **Develop roles and talent strategy:** Define roles and mix of workforce to provide care in line with the pathways, and new roles such as navigators, and recruitment strategy in line with new pathways (i.e. Pharmacy, Prescribers, Increasing CNS, and Nurse practitioners)
- **Multi-disciplinary:** Extend multi-disciplinary team development for key patient pathways and cohorts (i.e. stroke medical, nursing, and allied health model)
- **Extending hours for key services:** Implement initial shifts towards 24/7 including SMOs in-house until 8 pm, increasing overnight staff, and consideration to extended hours for nursing, allied health, and support services such as Laboratories and Pharmaceuticals

Technology:

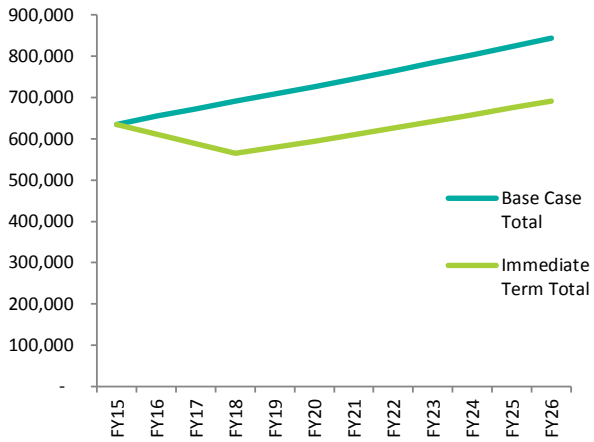
- **IT strategy:** Agreeing and defining the Electronic Health Record IT strategy, and establish WDHB's plan for self-help and preventative enabling technology (i.e. apps, website presence)
- **Best practice:** Continue to invest and development in new technology required to deliver highest care, including diagnostics, pharmacy, labs, and surgical technology
- **Model of care enabling technology:** Continuing to roll out enabling technologies such as E-referrals, telehealth, remote monitoring, eVitals, and iPads for community based teams
- **Reporting and analysis:** Develop required electronic systems to capture and report against outcomes, pathways, and targets. Intensify ongoing work to develop tools and platforms to provide operational intelligence (costing, activity, etc.) beyond what is currently available

The potential quantifiable impacts on hospital led services of this immediate term plan are outlined in the two graphs below, and the quality outcomes identified in the subsequent table.

Immediate term plan impact on bedday savings by Division

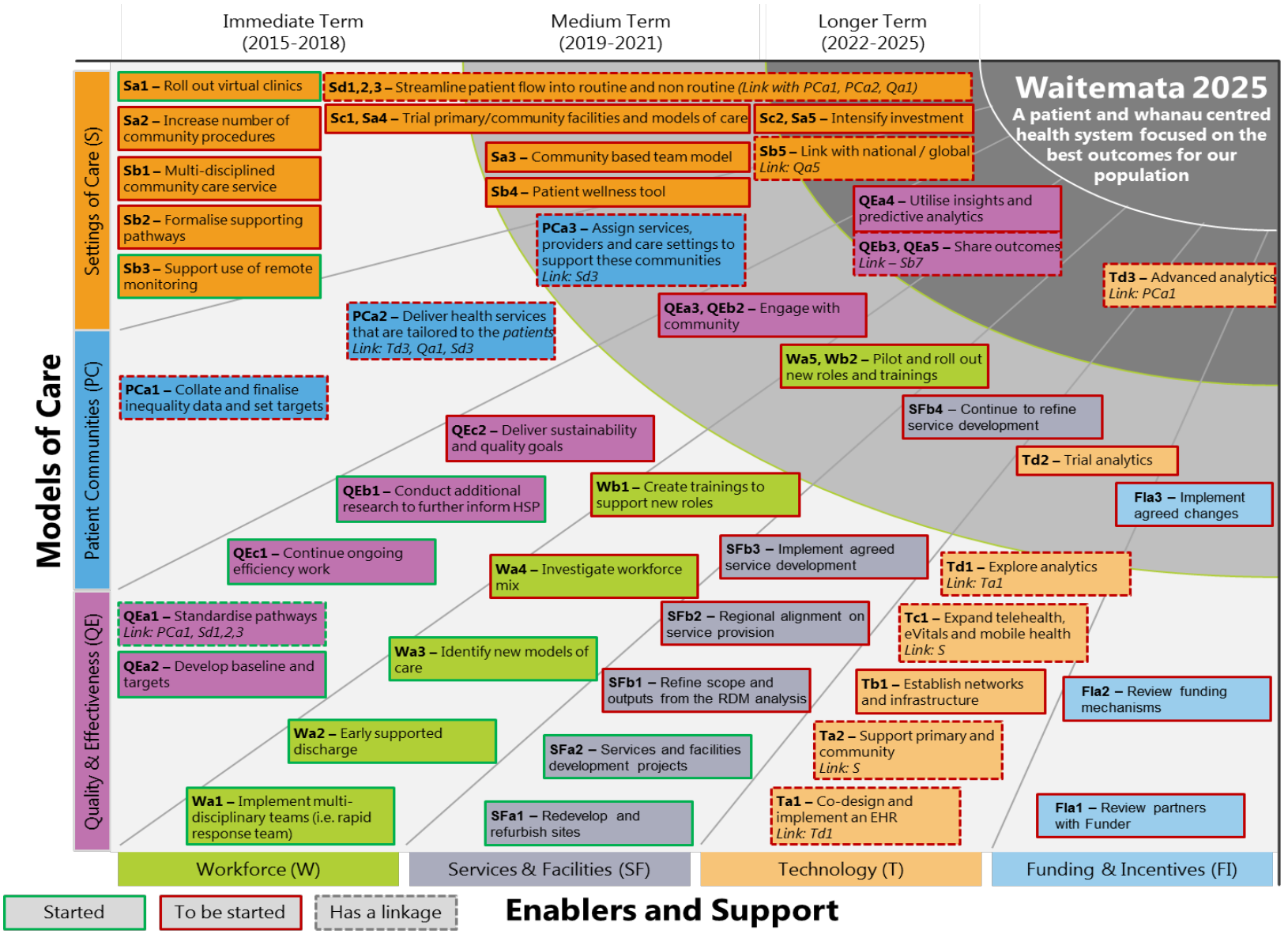


Immediate term outpatient attendances compared to base case to 2026



Medium to longer term summary

Beyond the immediate term, while continued focus is devoted to quality and effectiveness, activities become centred more on preventative care, segmenting care to focus acuity and resources in hospital settings and lower acuity in primary and community, collaborating with community partners and Northern region DHBs for best outcomes, implementing patient centric models of care for key cohorts, investing in alternative workforce models and associated models of care, and investing in connecting technology such as a comprehensive Electronic Health Record.


Immediate Term (2015-2018)
Medium Term (2019-2021)
Longer Term (2022-2025)
Waitemata 2025
A patient and whanau centred health system focused on the best outcomes for our population
Models of Care
Settings of Care (S)
Patient Communities (PC)
Quality & Effectiveness (QE)
Sa1 – Roll out virtual clinics
Sa2 – Increase number of community procedures
Sb1 – Multi-disciplined community care service
Sb2 – Formalise supporting pathways
Sb3 – Support use of remote monitoring
Sd1,2,3 – Streamline patient flow into routine and non routine (Link with PCa1, PCa2, Qa1)
Sc1, Sa4 – Trial primary/community facilities and models of care
Sa3 – Community based team model
Sb4 – Patient wellness tool
Sc2, Sa5 – Intensify investment
Sb5 – Link with national / global Link: Qa5
PCa3 – Assign services, providers and care settings to support these communities Link: Sd3
PCa2 – Deliver health services that are tailored to the patients Link: Td3, Qa1, Sd3
PCa1 – Collate and finalise inequality data and set targets
QEa4 – Utilise insights and predictive analytics
QEb3, QEa5 – Share outcomes Link – Sb7
Td3 – Advanced analytics Link: PCa1
QEa3, QEb2 – Engage with community
Wa5, Wb2 – Pilot and roll out new roles and trainings
SFb4 – Continue to refine service development
QEc2 – Deliver sustainability and quality goals
Td2 – Trial analytics
QEb1 – Conduct additional research to further inform HSP
Wb1 – Create trainings to support new roles
Fla3 – Implement agreed changes
QEc1 – Continue ongoing efficiency work
Wa4 – Investigate workforce mix
SFb3 – Implement agreed service development
Td1 – Explore analytics Link: Ta1
QEa1 – Standardise pathways Link: PCa1, Sd1,2,3
QEa2 – Develop baseline and targets
Wa3 – Identify new models of care
SFb2 – Regional alignment on service provision
Tc1 – Expand telehealth, eVitals and mobile health Link: S
SFb1 – Refine scope and outputs from the RDM analysis
Tb1 – Establish networks and infrastructure
Fla2 – Review funding mechanisms
Wa2 – Early supported discharge
SFa2 – Services and facilities development projects
Ta2 – Support primary and community Link: S
Wa1 – Implement multi-disciplinary teams (i.e. rapid response team)
SFa1 – Redevelop and refurbish sites
Ta1 – Co-design and implement an EHR Link: Td1
Fla1 – Review partners with Funder
Workforce (W)
Services & Facilities (SF)
Technology (T)
Funding & Incentives (FI)
Enablers and Support
Started
To be started
Has a linkage

3. *Work collaboratively with WDHB's communities to improve patient experience and achieve the best outcomes for our population*

Over the past four years, WDHB has made substantial progress in delivering WDHB's purpose and have identified a number of key health outcomes (as discussed within the Outcomes Framework in Section 1) that will ensure WDHB is providing the 'best care for everyone'. Incorporated in this is ensuring that WDHB moves from an outputs or process measure focus towards measuring for outcomes that really make a difference to patients and their families.

These longer-term population health outcomes are at the core of what this HSP is seeking to achieve. These outcomes are reinforced by the key health challenges outlined in Section 2 of this HSP and directly address the most important health needs of the community. Our plans in this area will be developed as part of the next phase of the Health Services Plan.

	Outcome	Measures
WDHB wide	**Highest life expectancy in New Zealand**	An increase in life expectancy at birth
	Reduce difference in health outcomes	A reduction in the ethnic gap in life expectancy at birth
Prevent ill health	**A smokefree Waitemata by 2025**	% of regular smokers
		% of hospitalised patients who smoke are offered brief advice and support to quit
	Halt the rise in obesity	% of adults who are obese
	Children get the best possible start	Infant mortality per 1,000 live births, % of 8 month children who are fully immunised, % of maternal smoking
Cure ill health	**The lowest mortality from cardiovascular disease (CVD)**	CVD mortality rate per 100,000 population, % of CVD receiving triple therapy, Quality Adjusted Life Years gained from coronary artery by-pass grafting and angioplasty
	The lowest mortality from cancer	Rate of cancer per 100,000 population, % of cancer survivors (5 year rate)
Ameliorate ill health	**Reduced morbidity and mortality for people with mental illness**	Suicide rate per 100,000 population, % of individuals aged <19 and 20–64 years with access to mental health services
	Older people experience independence and quality of life	% of our older population receiving home-based support or living in aged residential care, QALYs gained from cataract, knee and hip procedures in our 65+ population
	Patients stay safe in our hospitals	Hospital-standardised mortality ratio, Central line-associated bloodstream infections per 1,000 line days

Next Steps for this Health Services Plan

As highlighted above, there is a significant step change required from the current state to Waitemata 2025, and a number of shifts will be required in order for WDHB to achieve the end state. Some of the key next steps required following this Section of the HSP are described below.

1. **Further Health Services Planning for regional and primary / community services:** The scope of this stage of the HSP is limited to provider led services at WDHB, and a number of key trends and service responses pointing towards growing services within the community and collaborating more effectively regionally, additional planning and engagement needs to occur alongside community and regional DHB partners to identify the challenges and responses required over the next 10 years
    a. **Metro Auckland development plan:** A regional plan needs to be developed for service growth and investment across Auckland. This additional planning will need to include extending and validating the potential service development findings within this HSP
    b. **Primary and community services plan:** Working with primary and community partners to extend the hospital's identified initiatives and confirm plans around preventative, wellness, and segmentation of care. This will have a focus particularly on health inequalities for key patient cohorts (i.e. Maori and Pacific)
2. **Operational planning & prioritisation of immediate term initiatives:** Due to the large number of immediate term initiatives identified by services it is essential that they are prioritised and that a detailed plan is developed which builds towards the medium to long term goals
3. **Master site planning and facilities development:** Taking forward the services, facilities, and model of care changes identified in this HSP to develop a master site plan and associated business cases and submissions of capital plans
4. **Model of care changes:** Coordinating and prioritising the large number of potential model of care and patient cohort changes identified in this HSP
5. **Sustainability and financial stream:** Addressing the potential financial sustainability gap identified in this HSP by extending the ongoing Provider Sustainability Programme and ensuring appropriate measures, KPIs, and financial benefits are in place (to be led jointly by the CFO / Funder). Developing and accessing detailed business cases to progress developments identified in this HSP
6. **Technology strategy and roadmap:** With technology set to play an essential role over the next 10 years, a clear roadmap for investment and roll out is required to make sure model of care changes and facilities developments are appropriately enabled
7. **Workforce planning and talent strategy:** A key dependency of any future development is the ability to attract and retain an appropriately-trained workforce, while a number of model of care changes are contingent on the implementation of new roles and refocusing of current ones. This will require a detailed strategy to ensure the right people and roles exist to enable Waitemata 2025

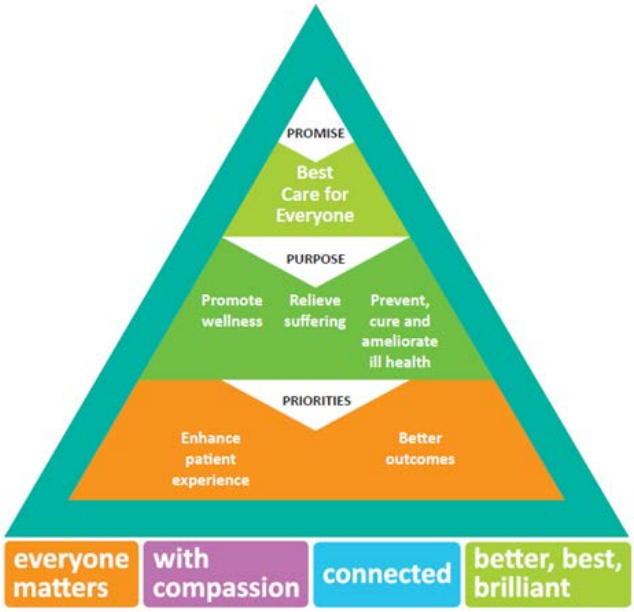
Introduction

Objectives of this Health Service Plan (HSP)

This document presents the Health Services Plan (HSP) for the Waitemata District Health Board (WDHB) for the next ten years. The purpose of this HSP is to set the overall direction for health services provided by WDHB for the next ten years to 2025 and specify a course of action to achieve this.

WDHB faced a number of critical challenges over the next ten years to align WDHB's existing health service delivery with changing patterns of need, models of care and technology – and all in a manner which makes the most effective use of current and future resources to achieve the 'best care for everyone'. This HSP projects the impacts of the current and expected demand growth and WDHB's current trajectory of action. It then introduces a series of more accelerated action to assess the impact this could have in meeting demand, quality and financial sustainability. Central to this process is to extend WDHB's promise, purpose, priorities, and values (figure below) into the context of future challenges, and to translate them into concrete plans for action.

WDHB promise, purpose, priorities and values



The HSP seeks to encapsulate all major anticipated change in the next decade, however, owing to the rapidly evolving nature of the medical field, some level of uncertainty and risk is inherent in predicting a future state beyond the next 0-3 years. Therefore, it is envisaged that the immediate term plan (next 2 years) has a higher level of certainty but for the outer years this HSP will serve as a directional guide, with the proposed actions revisited and refined over time as appropriate.

The objectives of the HSP are to:

- Describe and consider the key population, health, technology, facilities, and features of the WDHB in 2025
- Ensure WDHB is well positioned to provide 'best care for everyone' with the right mix of services, facilities, and sector relationships e.g. with other DHBs, primary care or other providers. To do this, WDHB needs to:

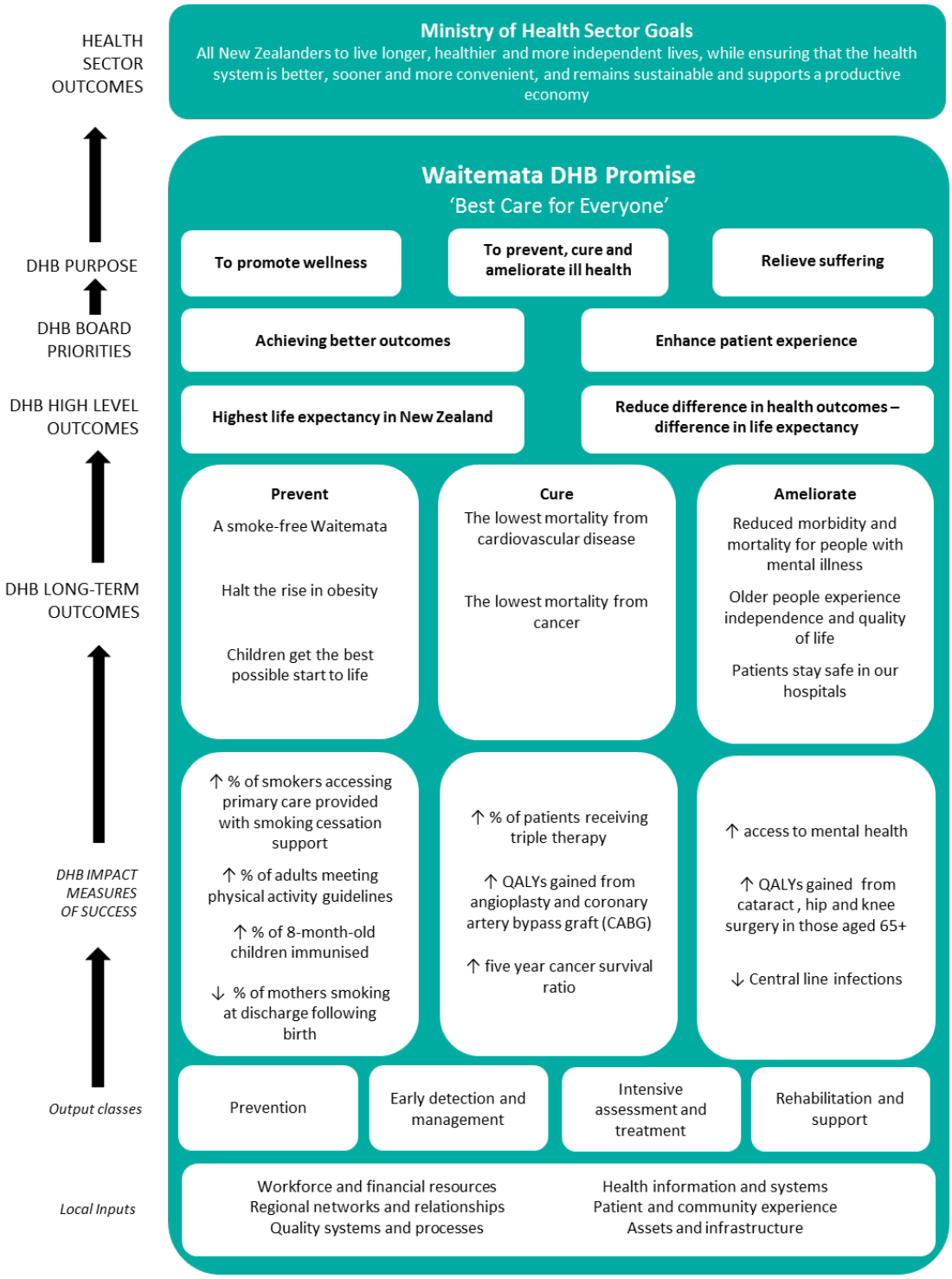
  - Consider current and future models of care to effectively link provider arm planning with primary care and community services development, facilities planning, workforce planning, and capital planning
  - Provide a plan which describes how, where (location and setting), and the type/level of services to be delivered to WDHB communities locally, regionally and nationally where relevant
- Inform more robust long term financial planning, facilities and asset management planning, workforce and information technology planning and future business cases
- Begin an ongoing planning cycle for the next 10 years, to be followed by a Master Site Planning process, detailed operational planning, and regular review of outcomes and objectives

Outcomes of the Health Services Plan

Over the past four years, WDHB has made substantial progress in delivering WDHB's purpose and have identified a number of key health outcomes (as discussed within the Outcomes Framework below) that will ensure WDHB is providing the 'best care for everyone'. Incorporated in this is ensuring that WDHB moves from an outputs or process measure focus towards measuring for outcomes that really make a difference to patients and their families.

These longer-term population health outcomes are at the core of what this HSP is seeking to achieve. These outcomes are reinforced by the key health challenges outlined in Section 2 of this HSP and directly address the most important health needs of the community.

Currently WDHB has identified two overall outcomes as well as a number of outcome measures and supporting impact measures that will demonstrate whether WDHB is delivering WDHB's purpose and improving the health and wellbeing of WDHB's population. These outcomes and impact measures are presented in the intervention logic diagram on the following page, but will be continually refined and developed further as part of this HSP. They are also carried forward in Section 4 of this HSP to identify detailed measures and targets against each outcome.


HEALTH SECTOR OUTCOMES
Ministry of Health Sector Goals
All New Zealanders to live longer, healthier and more independent lives, while ensuring that the health system is better, sooner and more convenient, and remains sustainable and supports a productive economy
DHB PURPOSE
Waitemata DHB Promise
'Best Care for Everyone'
To promote wellness
To prevent, cure and ameliorate ill health
Relieve suffering
DHB BOARD PRIORITIES
Achieving better outcomes
Enhance patient experience
DHB HIGH LEVEL OUTCOMES
Highest life expectancy in New Zealand
Reduce difference in health outcomes – difference in life expectancy
DHB LONG-TERM OUTCOMES
Prevent
A smoke-free Waitemata
Halt the rise in obesity
Children get the best possible start to life
Cure
The lowest mortality from cardiovascular disease
The lowest mortality from cancer
Ameliorate
Reduced morbidity and mortality for people with mental illness
Older people experience independence and quality of life
Patients stay safe in our hospitals
DHB IMPACT MEASURES OF SUCCESS
↑ % of smokers accessing primary care provided with smoking cessation support
↑ % of adults meeting physical activity guidelines
↑ % of 8-month-old children immunised
↓ % of mothers smoking at discharge following birth
↑ % of patients receiving triple therapy
↑ QALYs gained from angioplasty and coronary artery bypass graft (CABG)
↑ five year cancer survival ratio
↑ access to mental health
↑ QALYs gained from cataract, hip and knee surgery in those aged 65+
↓ Central line infections
Output classes
Prevention
Early detection and management
Intensive assessment and treatment
Rehabilitation and support
Local Inputs
Workforce and financial resources
Regional networks and relationships
Quality systems and processes
Health information and systems
Patient and community experience
Assets and infrastructure

Scope

This document presents the HSP for Waitemata District Health Board (WDHB) for the next ten years. The purpose of this HSP is to set the overall direction for health services provided by WDHB for the next ten years to 2025 and specify a course of action to achieve this.

Due to urgent capacity concerns and facility development needs within current hospital services, the scope of this initial version of the HSP is to consider hospital and community services provided by WDHB. As such, the HSP considers services that are, or have the potential to be, provided by WDHB across:

- Hospital services
- Outpatient clinics and services
- Provider-led community and regional and national services

The interfaces with the following services are identified, but further work is required to plan out collaborative action and next steps:

- Primary care services
- Community services provided by Private Health Organisations (PHO), Non-government Organisations (NGO) and other community partners
- Regional and National led services

The objective of the HSP is not only to articulate a strategy and plan but to initiate a continuous process of engaging with the Clinical Services. The HSP has been developed with the involvement of 39 service level workshops, which were attended by clinicians, managers, nursing and Allied Health staff, as well as two open day feedback sessions – one with over 70 clinical directors and operational managers invited and another with 61 stakeholders including representation from PHOs, a range of NGOs, other agencies such as the Ministry of Social Development, Ministry of Education, Accident Compensation Corporation, the Police, and consumer representatives.

It is noted that at present there are capacity issues within the hospital and there are a variety of urgent next steps regarding service and facilities development. This will need to be done as part of a coherent plan and have been recommended under the next steps. Additionally, it has not been possible to develop a fully costed plan in the time available and given some of the uncertainties involved some of the financial impacts would be difficult to determine with any confidence. A large amount of work will be required to deliver upon this HSP and a detailed implementation plan will need to be undertaken by Divisions as part of the annual planning process.

Methodology and process

Data and research

A Health Services Planning process was conducted over a four month period comprising a review of relevant international and national research and data, review of relevant policy and strategy, and extensive engagement with service providers and senior management within the WDHB catchment.

A variety of data, including activity based, FTE and financial was sourced from WDHB, external providers and the National Costing Collection and Pricing Programme (NCCP) cost cubes.

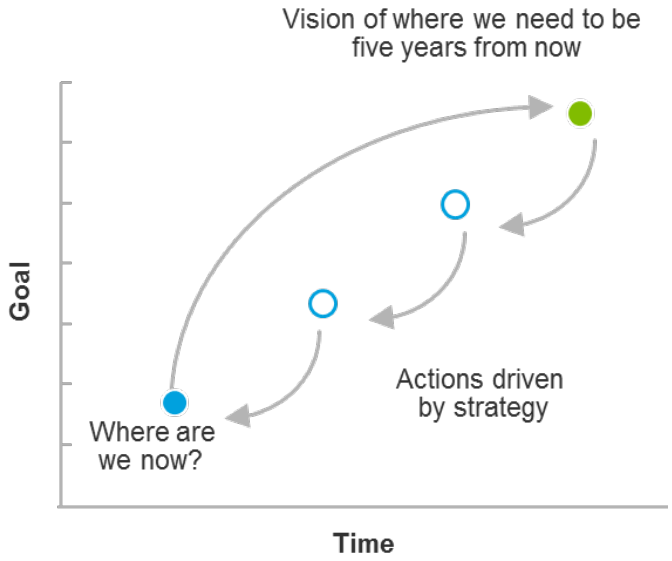
The HSP has been co-designed with the involvement of 39 service level workshops, which were attended by Clinical Leaders, Medical, Nursing, Allied Health and Managerial staff, as well as two open day feedback sessions – one with over 70 Clinical Directors and Operational Managers invited and another with 61 stakeholders including representation from PHOs, a range of NGOs, other agencies such as the Ministry of Social Development, Ministry of Education, Accident Compensation Corporation, the Police, and consumer representation both through Health Links and through Disability Support Advisory Committee (DSAC) and Community & Public Health Advisory Committee (CPHAC) representatives.

These are detailed in Appendix 1.

Process

The process of developing this HSP – in its current form – can be characterised into four sections of work.

In essence, the HSP formulates the end state (Waitemata 2025) based upon an understanding of forecast change and then determines the actions which will most efficiently step WDHB towards Waitemata 2025. (Figure below)



- **Section 1 Current state definition and overview:** Available data is used to describe the current state of service delivery in WDHB – facilities, infrastructure, utilisation, models of care, workforce, inter- and intra- patient flow
- **Section 2 Identification of challenges:** Challenges are identified at three levels – at the global level (mega-trends which impact all health systems), the WDHB level and the service specific level. Challenges are identified through a review of literature, analysis of available data, and through workshops with WDHB senior management and service providers

- **Section 3 Definition of strategy and direction**: This Section of work articulates the desired 'end-state' for the HSP – the overall direction to guide the development of activity and articulates a view of what the health care system will be like by 2025. This direction was developed with the help of the HSP Steering Committee and takes into account mega-trends, policy, and service level feedback and aspirations. It represents a directional view and will need to be frequently visited in order for this to be real and to represent a relevant and shared end state across WDHB
- **Section 4 Identification of timeframes for action:** Potential actions, spanning three time horizons within the planning period which have been designed to lead the health service closer to the desired Waitemata 2025 in a manner which is aligned with the core principles. Work has also been put into estimating the 'base case' or status quo – in short the impact on current services if WDHB continues on the current trajectory in 10 years' time. The timeframes facilitate the end state of seeing WDHB as a single provider serving its patient and community rather than viewing this through the individual clinical services lens. This way of planning also supports the emerging view of serving different cohorts of patients defined not just by their clinical needs but by how they experience the health system

Planning principles

The following represent the core principles, based on WDHB's Promise, Priorities, and Values that were considered for all service configuration decisions outlined in this HSP:

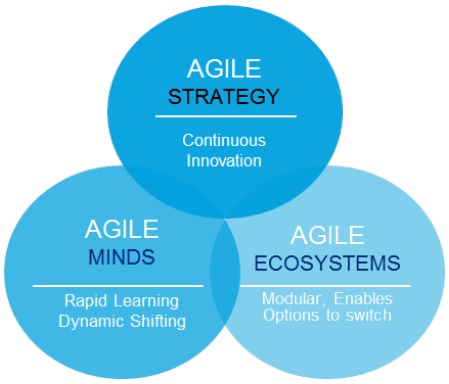
Theme	Description
Better outcomes	• Enable better outcomes for our patients, our population and staff • This will include achieving health equity for our Maori and Pacific populations
Improve patient experience	• The patient experience underpins all service planning as well as the redesign and allocation of services. • Patients and staff will be engaged early and often in the planning processes
Clinically driven	• Build clinical and executive leadership capability across the entire system • Supporting clinically led care design and delivery • Enabling clinicians to be the stewards of healthcare resources
Relentless focus on quality improvement	• Safe, clinically effective care that is focused on the needs of the patient, their family/whānau and our community • Services and care are based on the best knowledge and evidence • Partner with patients, families and carers to share decision making about their care • Service performance measurement, management and benchmarking are focused on the right things
Leadership in innovation and improvement	• Driven by the Institute of Innovation and Improvement • Services are supportive and receptive to innovation and change • Become a leader in implementing new, flexible models of care and new technologies that will support service delivery in non-traditional environments
Best value for public health resources	• Financial sustainability and affordability informing decision making • Best clinical care at the best value for money • Design sustainable services around the needs of our population, now and into the future • Flow of patients through services is rational, seamless, timely and effective • Create opportunities for strategic regional collaboration, relationship and partnerships within and outside of the health sector

Agile planning and review cycle

Healthcare services are changing rapidly. To ensure WDHB does not have stranded investments or service development ahead of the growth curve, the HSP needs to embrace the concept of agility. Agility can be defined as the ability to rapidly and thoughtfully respond to changing conditions, moving seamlessly from one position to another. An agile organisation consists of 3 types of agile capabilities (see below).

WDHB has already embarked on a number of agile initiatives including:

- Growth and innovation primarily through the Leapfrog and innovation initiatives
- Leadership and organisation primarily through the Richard Bohmer streams
- End state and values work
- Collaboration, organisation structure and governance most notably with ADHB



Agile Strategy provides an approach for making and implementing strategic decisions that is continuous and includes:

- Strategy
- Growth and Innovation
- Leadership and organisation

Agile Minds targets the human capital of the organisation and the mechanisms to affect behaviour, including:

- End state and values
- Performance management
- Capability Building
- Collaboration
- Continuous learning and motivation
- Customer orientation

Agile Eco Systems includes tangible and intangible business systems (internal / external) which enable the organisation to operate, including:

- Organisational structure and governance
- Decision making
- External relationship architecture
- Policies, rules and regulation
- Information architecture and flow
- Business processes
- Technology
- Customer orientation

The HSP is another facet of preparing a WDHB that is fitter for the future. As such, an agile HSP strategy should seek to delay commitments as long as possible while seeking to enhance future options. This principle has led to the development of time horizons for the HSP, with higher certainty and granularity in the immediate term (0-3 years) and directional milestones to achieve the desired end state in 2025 beyond this. This should be reinforced by regular review and revalidation of direction as Waitemata moves towards 2025.

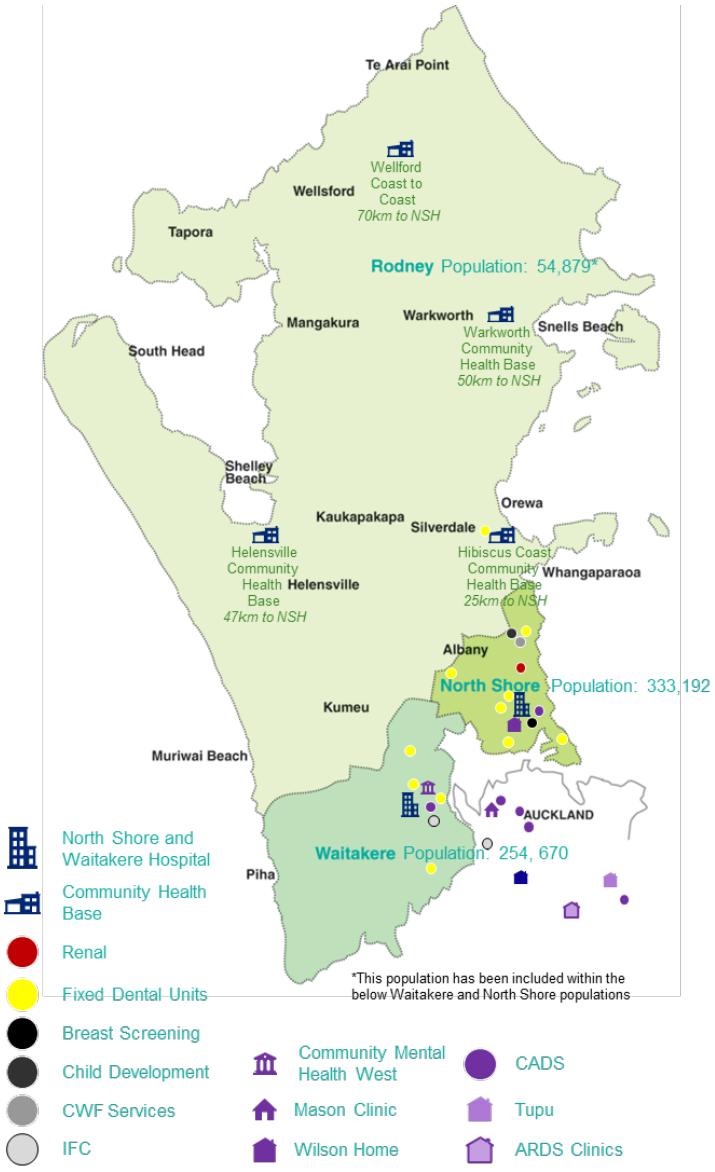
Section 1: Current state overview

This Section provides a brief overview of the WDHB current state as well as a snapshot of current services and initiatives. Further summary of the population and catchment are provided in Section 2.

Current snapshot

Waitemata District Health Board (WDHB) is the largest New Zealand DHB by population and serves the communities of North Shore, Waitakere and Rodney. There is a population of 587,862 which is split between three geographic catchments, North, West, and Rodney with populations of 333,192, 254,670, and 54,879 respectively expected in 2016.[2] This population is made up of approximately 63% European/NZ, 20% Asian, 9.7% Māori, and 7.3% Pacific peoples.[3]

Waitemata geographic catchment and facilities footprint



[2] The population of Rodney is 54,879 as at the 2013 census which is included within the North and West population figures

[3] http://www.waitematadhb.govt.nz/Portals/0/Documents/Planning/PopulationProfile/WDHB2015PopulationHealthProfileWDHB.pdf

WDHB is organised around 60 specialities across 6 Divisions and conducted 109,829 inpatient discharges and 634,619 outpatient attendances in 2014/15. The major facilities are North Shore Hospital, Waitakere Hospital, and Mason Clinic, with 776 overnight beds and 811 total overnight and day beds between the two main hospital sites (note: calculated based on utilisation, not total beds available) and another 106 beds at Mason Clinic. Other major facilities include the Wilson Centre, Pitman House, and Slark Hyperbaric Unit.

WDHB provides secondary hospital and community services from the North Shore and Waitakere hospitals, Mason Clinic and 30 community sites throughout the district and it employs over 6,800 people. WDHB's services are organised into six Divisions being: Child Woman and Family, Mental Health, Surgical and Ambulatory, Hospital Services, Medicine and Health of Older People, and Elective Surgery. WDHB also contracts with two Primary Health Organisations (PHOs), multiple community providers and NGO partners.

WDHB is currently funded under the Vote Health funding which is distributed via a Population Based Funding (PBF) model. WDHB has an approximate budget of $1.4b, mainly from the Ministry of Health.

WDHB is the National Provider for Hyperbaric medicine and the Northern Region provider for Mental Health Forensics and Alcohol and Drug Services, Child Disability, and Child Dental Services.

Beds and demographics:

- There are a total of 776 estimated overnight secondary service beds across the North Shore, Waitakere and Elective Surgical Centre, with the majority of those beds being in North Shore Hospital and within the MHOP and SAS divisions[4]. There are an additional 106 beds in the Mason Clinic site.
- WDHB has a diverse population with approximately 20% identifying ethnically as Asian (third highest proportion of Asian people of all DHBs behind ADHB and CMDHB) and 9.7% as Maori
- The regional forensic service currently provides 108 beds in Auckland (plus an additional 5 currently provided by Capital and Coast DHB) for a total of 113. This serves the core regional Mental Health (101) and Intellectual Disability (12) forensic population

Overnight Beds: *(Ratana Walker)*	NSH	WH	ESC	Mason Clinic *(External source)*
MHOP:	280 Beds	124 Beds	0 Beds	0 Beds
SAS:	177 Beds	0 Beds	16 Beds	0 Beds
CWF:	49 Beds	48 Beds	0 Beds	0 Beds
MH	42 Beds	40 Beds		113 Beds
Total:	**548 Beds**	**212 Beds**	**16 Beds**	**113 Beds**
			776 Beds	

NB: Bed figures above have been rounded

NB: 5 of these are provided by C&CDHB

Other notable sites include:

- Wilson Home (In trust)
- Pitman House
- Te Puna o Te Ora
- Renal unit
- Helensville Community Health Base
- Hibiscus Coast CHC
- Breast Screening clinics
- CADS Central
- CADS North, South, West
- CADS Mt Eden
- Warkworth
- Wellford Coast to Coast
- Community Dental Clinics (11)
- Child Development
- CWF Services
- Work Foundations
- Whanau House IFC
- New Lynn IFC
- Slark Hyperbaric Unit

[4] An inpatient bed model to forecast bed demand to 2026 was conducted by WDHB and used as the basis for inpatient bed projections. This model is based on historical bed-day data and projecting forward the required beds using Statistics NZ produced population projections for WDHB

Workforce:

- WDHB has a workforce of just under 7,000 staff and 6,000 FTE (average accrued). The majority of this workforce is made up of Nursing, Allied Health and Administrative staff. MHOP, MH and SAS have the largest FTE workforces with CWF, Hospital Operations and ESC following respectively

FTEs: *(WDHB Data)*	MHOP	MH	SAS	CWF	Hosp Ops	ESC	Total
SMO	106	62	126	36	5	0.1	**335**
MOSS	26	17	14	8	-	-	**65**
Registrar	75	26	61	20	1	-	**183**
House Officer	68	7	29	8	-	-	**111**
Nursing	1,105	609	554	328	25	68	**2,689**
Allied Health	300	382	183	394	230	0.3	**1,489**
Support	-	16	40	6	234	-	**295**
Mgmt/Admin	172	83	173	62	295	4	**789**
Total:	**1,853**	**1,201**	**1,180**	**861**	**790**	**72**	**5,956**

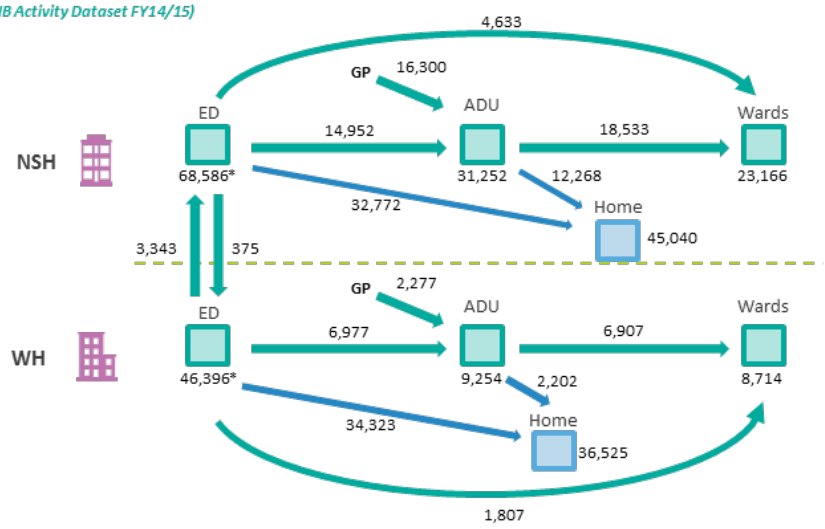
NB: *FTE figures above have been rounded*

Patient Flows:

- North Shore performs the majority of the acute and elective events at WDHB with the exception of elective MHOP at Waitakere Hospital
- There is significant flow to Auckland Hospital from WDHB across both acute (11,831) and elective (11,981) events, totalling 23,812 (19% of total events). The Specialities with the largest 'outflows' are; Ophthalmology, Emergency Medicine, Maternity, Ear Nose and Throat, and Orthopaedics
- Waitakere Hospital has a large ED presence, which is nearly at parity with North Shore volumes and growing (46,000 and 68,000 respectively). A significant number of acute patients are transferred across from Waitakere to North Shore, totalling 3,343 from Waitakere ED to North Shore ED in 2014. There is also a large volume of acute psychiatric work that is undertaken in community and from WDHB's community locations that the Mental Health services noted as flowing into ED attendances
- ESC is steadily increasing its volumes since its opening, where elective General Surgery and Orthopaedics are the services with the largest volumes

Event Snapshot: (WDHB Activity Dataset FY 14/15)	Acute			Elective			
	MHOP:	CWF:	SAS:	MHOP:	CWF:	SAS:	Total:
NSH	31,390	11,699	11,762	1,650	1,380	4,344	62,215
WH	19,240	10,674	89	140	448	780	31,371
ESC (elective SAS)	Gen Surg: 1,706		Ortho: 1,520	Gynae: 607		Urology: 533	4,366
							97,952

Acute ED events to ward volumes (Incl ED Outpatients):
(WDHB Activity Dataset FY14/15)

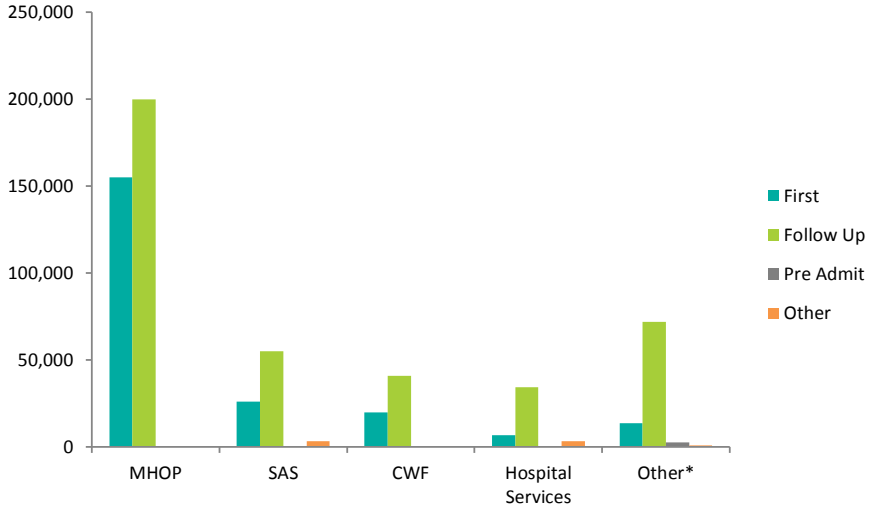


*This figure was created from multiple datasets. Due to this a minor number of events are missing.

Outpatient presence:

- The National Non-Admitted Patient Collection database (NNPAC) provides nationally consistent data on non-admitted patient (outpatient and emergency department) activity. While it contains a variety of outpatient activity types, the vast majority are in first attendances and follow ups, which represent a sizeable portion of total DHB activity with 221,000 and 402,211 attendances respectively. The MHOP division represented the majority of these with 70% of first attendances and 50% of follow ups

Provider outpatient and community service type discharges by Division



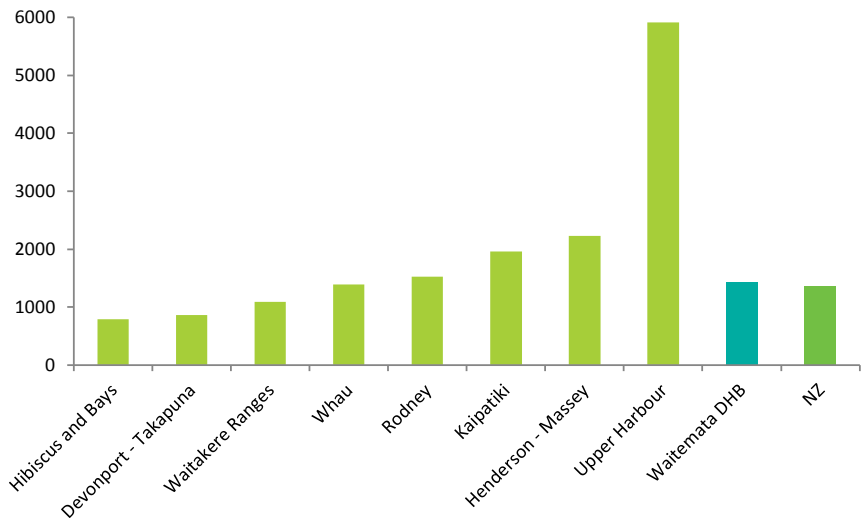
Number of attendances	First	Follow Up	Pre Admit	Other
Medicine and Health of Older People	155,051 (70.1%)	200,042 (49.7%)	309 (8.6%)	197 (2.5%)
Surgical and Ambulatory	26,006 (11.8%)	54,854 (13.6%)	567 (15.7%)	3,280 (42.3%)
Child Women and Family	19,756 (8.9%)	40,867 (10.2%)	260 (7.2%)	0 (0.0%
Hospital Services	6,574 (3.0%)	34,453 (8.6%)	1 (0.0%)	3,313 (42.7%)
Other[5]	13,654 (6.2%)	71,995 (17.9%)	2,471 (68.5%)	969 (12.5%)
Total:	**221,041**	**402,211**	**3,608**	**7,759**

[5] Other includes services performed by other sites on WDHB patients where WDHB does not provide the service. These include: Venereology, Specialist Nuclear Medicine, Other Medical Services, Vascular Surgery, Substance abuse detoxification services (medical), Spinal Surgery, Plastic Surgery [excluding burns], Ophthalmology, Oncology, Neurosurgery, Neurology, Maxillo-Facial Surgery, and Burns Surgery

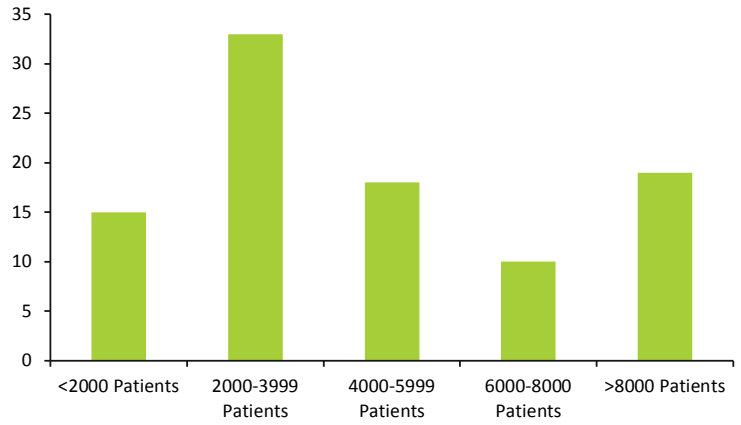
Primary and Community Care:

- WDHB has agreements with 2 PHOs, being 'ProCare Networks Limited' and 'Comprehensive Care in Association with Waitemata PHO'.
- The number of GPs per population varies significantly by local board for WDHB with most local boards having a much larger population served per GP than the New Zealand average
- Upper Harbour has a very low number of GPs with several nearby in Hibiscus and Bays
- Overall WDHB has a proportion of GPs to population very similar to the New Zealand average

Population per GP by local board, 2011



Number of Waitemata practices by number of enrolled patients, Q1 2015



- WDHB currently holds 539 contracts, delivered by 348 individual Providers. This equates to approximately 3,100 services. The table below provides a snap-shot of current contracts by service area. Within this Mental Health has 53.72 FTE and 163 beds within the primary or community care setting
- Within Health of Older People, Aged Residential Care (ARC) has 358 Dementia Services beds, 1,580 Hospital Services beds, 87 Psychogeriatric Services beds, 1,328 Rest Home Services beds (with 15 hospice beds not included in the below dataset)

NB: FTE figures above have been rounded

Contracted NGO Services 2015 as at 7 Oct	Providers	Contracts	Avg Contract per Provider	Services Provided	Additional Information
Health of Older People	55	131	2.4	214	3,353 ARC beds
Mental Health	16	27	1.7	-	53.72 FTE, 163 Beds
Pharmacy	116	139	1.2	139	-
Primary Care	23	67	2.9	103	-
Other					
Women, Child and Family	20	32	1.6	32	-
Community Engagement	2	2	1.0	2	-
Hospital Group	3	3	1.0	3	-
Maori Health	5	11	2.2	11	-
Pacific Health	4	21	5.3	21	-
Oral Health	104	106	1.0	105	-
Total:	**348**	**539**	**1.5**		

Current major initiatives

At present there are a number of significant programmes of innovation and development underway at WDHB which aim to deliver upon WDHB's promise and purpose.[6]

Patient experience programme

Enhancing patient experience is one of the two priorities of the WDHB Board. Improving patient experience leads to better emotional health, symptom resolution, less reported pain, and more effective self-management. We have developed a programme of activity to measure and understand experience, and to use this intelligence to improve the quality of services. Our experience programme includes capturing and monitoring continuous real-time feedback from patients and whānau. Quantitative and qualitative analysis is available at a ward/service level to drive localised improvement as well as informing organisational initiatives. Qualitative feedback is mapped against the organisational values and behavioural standards to provide a patient-centred measure of how well we are living up to our values.

Innovation improvement and sustainability

In order to continually improve outcomes and processes of care WDHB is developing its innovation and improvement capacity and capability. Innovation, research and development are an important focus for WDHB. The Awhina Health Campus contributes to WDHB's promise of 'best care for everyone' by supporting and providing facilities and resources for research and innovation. Awhina collaborates with tertiary education institutes, other DHBs, NGOs and primary health care providers to:

- Create district-wide centres of excellence that reflect population needs and build value for the Waitemata district
- Substantially strengthen and embed best-practice learning, research and knowledge into practice
- Enable innovations oriented to improve patient outcomes
- Build learning, research and innovation capabilities to enhance and improve the quality of service provided to WDHB's population

The centre for health IT creative design

This is a research and development centre targeted at improving patient and whānau experience and outcomes through the adoption of information technology (IT) and evidence-based creative design. Technology adoption sites within the DHB (currently two wards in North Shore Hospital) act as a canvas for the exploration of new ideas – to develop, adapt, implement, evaluate, refine and display new ideas, enabling safe and ethical research and development, and aiming to inspire further ingenuity on which the evolution of WDHB's health system depends. This includes innovation partnerships with industry and evaluation partnerships with academic institutions. Adoption within the sites aims to inspire or catalyse subsequent tailored roll out and cross pollination of ideas.

Leapfrog programme

The Leapfrog programme oversees a number of initiatives that have been identified as likely to have key impacts in the short-to-medium term against the DHB's purpose and priorities, which align with the organisational values. The intention of the programme is to make a step change in these strategic organisation-wide projects, and to assist in instilling the culture of improvement and innovation, demonstrating that WDHB is prepared to lead in these areas, prepared to learn from international exemplars, and able to implement rapidly. The current Leapfrog project areas include: Best data capture methods;

[6] This information was largely retrieved from the WDHB 2015/16 Annual Plan with additional information from WDHB.

Decision support algorithms in clinical practice; Primary Care Connections; Organisational Mobility Strategy; Best facilities planning; Better outpatient follow-up; and Electronic order entry systems.

Institute of innovation and improvement

An Institute for Innovation and Improvement will support data-driven, clinically-led outcomes-based care at WDHB by providing dedicated resources and expertise for clinical teams to design and implement models of care and best practice care processes that improve health outcomes, and patient and whānau experience. The Institute will support WDHB's enhanced care management and clinical leadership model, which involves clinicians at all organisation levels engaging in care process redesign and tracking outcomes, with a group of clinical leaders taking on an enhanced management role with control of, and responsibility for, service design and day-to-day clinical operations.

Clinical leadership

WDHB is committed to supporting clinically led care design and delivery. This commitment is evident in WDHB's care design and delivery processes, workforce innovations, learning and development opportunities, and governance structures.

WDHB's intention is to increase clinician responsibility for, and control over, service design and day-to-day clinical operations. WDHB seeks to move from a situation where clinicians are users of healthcare resources to a situation where clinicians are the stewards of those resources. To support this transition, WDHB is investing in building the networks, processes and capability to deliver the tasks of clinical leadership.

A range of leadership and management development activities are available at WDHB. These activities are offered across all career levels to both clinical and non-clinical staff, and include a new Fellows Programme. WDHB's clinical leaders and clinical networks will continue to be given strong mandates to shape and deliver services in partnerships with management. This will build on the significant achievements to date and will continue to play a lead role in shaping services to meet future health needs.

Provider sustainability programme

WDHB have a set of programmes that are either underway or planned to commence. These programmes aim to improve efficiency and performance across a number of services and their impact will be factored into the Health Services Planning.

A number of performance improvement initiatives across the four divisions of the Provider Arm are documented as part of the Provider financial sustainability programme. These initiatives are either underway and being carried out by division staff in addition to business as usual activities, or have been prioritised by the Provider Arm to receive project support from the Institute of Innovation and Improvement or are awaiting resource to commence implementation. These initiatives will contribute to increased efficiency of service delivery and financial sustainability.

Some of the key initiatives are:

- Minimal Invasive Gynaecology day surgery
- Emergency Department rostering review
- OR utilisation reviews
- Long term patient cohort analysis

Waitemata 2025 facilities refurbishment

While this HSP sets the foundation for the long term and speaks to the key effectiveness changes over the next 2-3 years, a parallel programme has been launched to address immediate capacity issues, provide rapid upgrade and refurbishment, and undergo interim facility development to increase bed capacity. These initial

steps are essential to address short term capacity issues and improve patient experience, which were a consistent theme in services workshops.

Section 2: Waitemata District Health Board's key challenges over the next 10 years

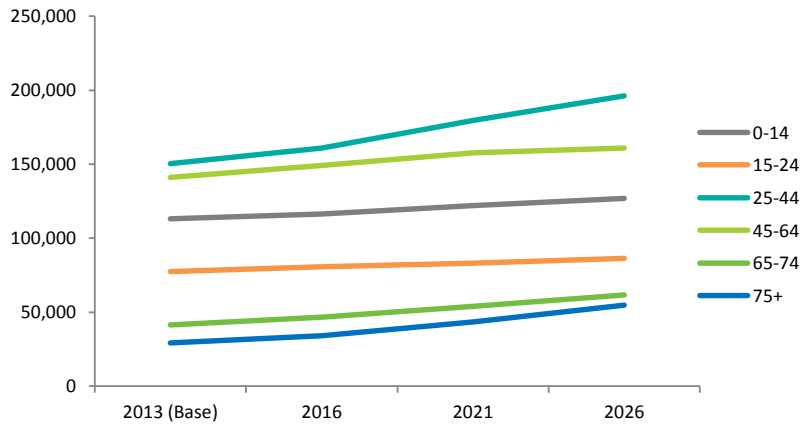
This Section identifies the key challenges that this HSP seeks to consider and address over the next 10 years, including: population composition and health, growth in demand, financial constraints, and WDHB wide service delivery challenges.

There are also a range of service specific challenges derived from the workshops; these are outlined in Section 3.

Population profile and health challenges[7]

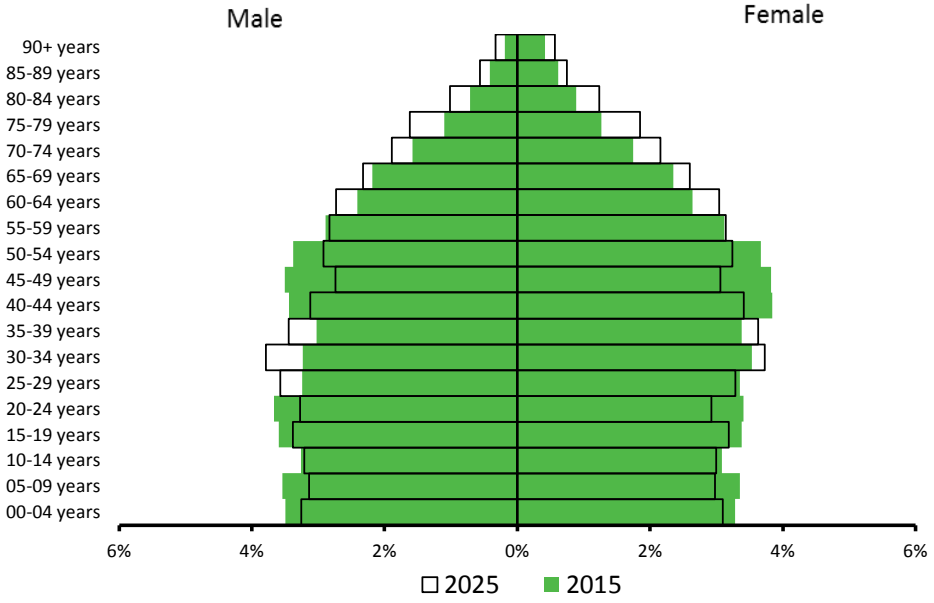
WDHB contains approximately 587,000 people making it the largest population of all New Zealand's DHBs. WDHB has an ethnically diverse population with 10% Māori, 7% Pacific, 20% Asian and the remainder being European/Other. The region contains a large migrant population with over one third of WDHB's population born overseas. The population is relatively affluent, with a large proportion living in areas with high socio-economic standards. The median personal income of WDHB's population is fourth-highest amongst DHBs in New Zealand.

WDHB's total population is expected to grow 24% by 2026 with the largest growth in the 25-44, 65-74 and 75+ age groupings

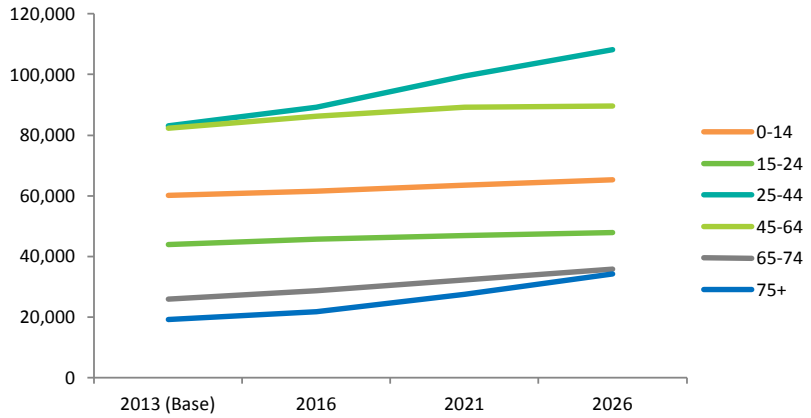


[7]http://www.waitematadhb.govt.nz/Portals/0/Documents/Planning/PopulationProfile/WDHB2015PopulationHealthProfileWDHB.pdf

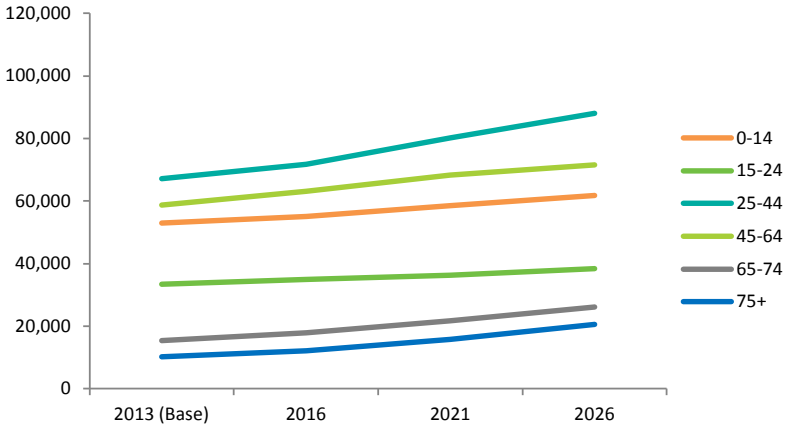
There will be a large shift in the age profile through to 2025



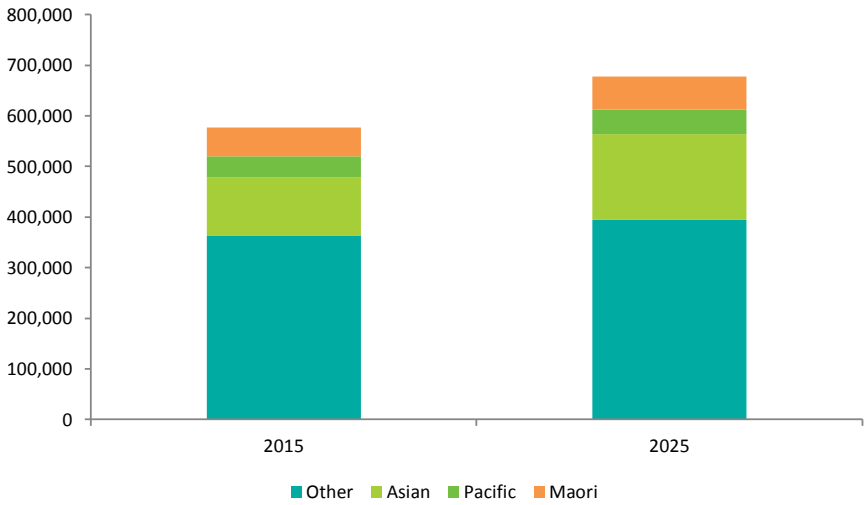
The population is expected to grow by 21% by 2026 in the North region of WDHB with large growth In the 25-44 and 75+ age groups



The population is expected to grow by 29% by 2026 in the West region of WDHB with large growth across all age groups (except 15-24)

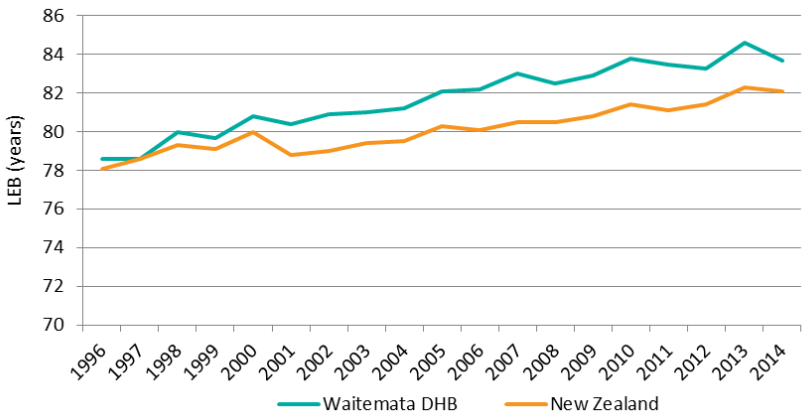


The Asian population will be the fastest growing during 2015 to 2025

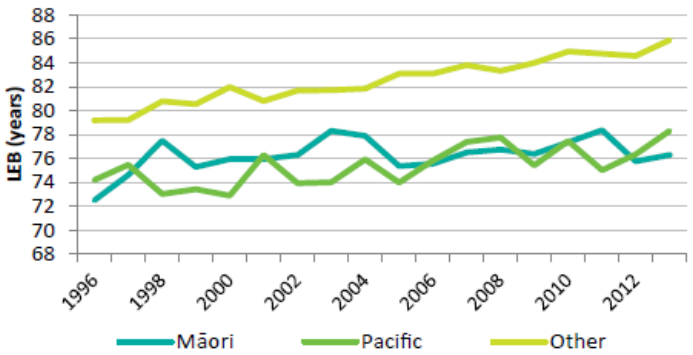


WDHB's population enjoys the highest life expectancy in NZ, with the population living on average to the age of 83.7 years, over one and a half years higher than the national figure, having increased by 2.5 years of life over the past ten years. WDHB's mortality rates from cardiovascular disease and cancer, the two biggest causes of death, have declined steadily over recent years and are among the lowest in New Zealand.

WDHB has a higher life expectancy than the NZ average

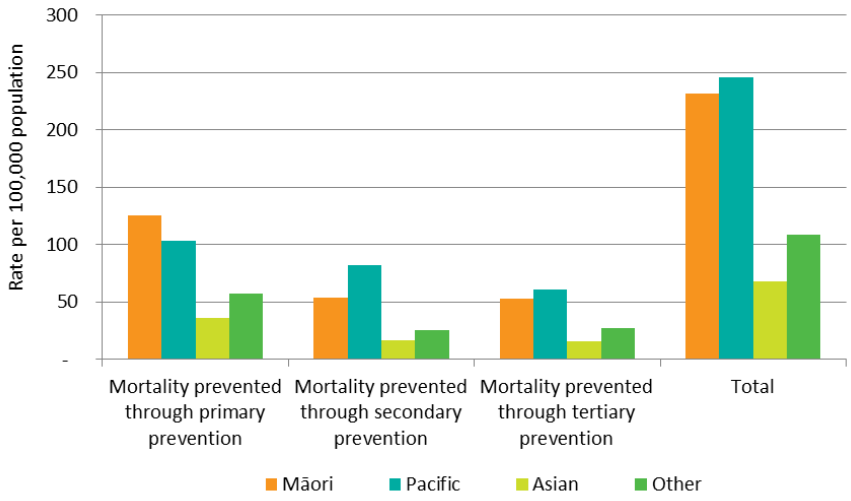


Average life expectancy within WDHB vary significantly by ethnicity with Maori and Pacific having a much lower life expectancy

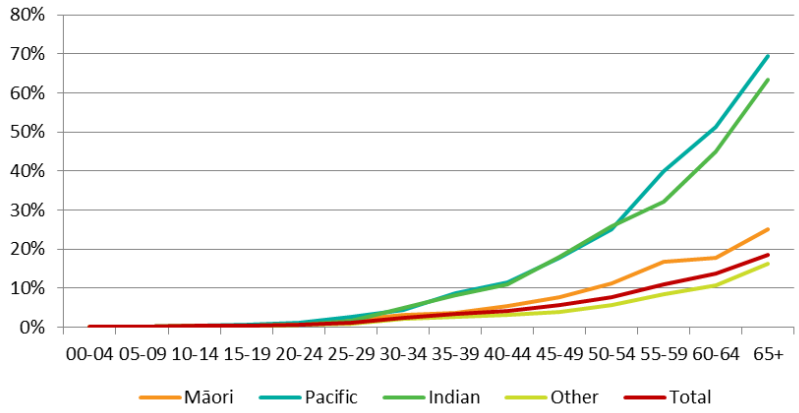


Although the majority of WDHB's people enjoy very good health, particular population groups in WDHB's district experience inequalities in health outcomes. This is most starkly evidenced by the gap in life expectancies between Maori and Pacific which when compared to 'Other' have a gap in life expectancy of approximately 8 and 10 years. While the expected life expectancy for Maori and Pacific is generally higher at WDHB than other DHBs, this is still not the outcome WDHB aspires for. With better prevention of ill health, WDHB could improve WDHB's rates of avoidable mortality and increase healthy years of life for WDHB's residents. Over 700 potentially avoidable deaths occur among WDHB residents every year (27% of the total). One in five of these are among WDHB's Māori and Pacific populations. Of these deaths, half could have been avoided through primary prevention, for example through adopting healthier lifestyles; a quarter could have been prevented by identifying and managing problems like hypertension before they caused illness (secondary prevention); and a quarter could have been avoided through prompt identification and treatment (tertiary prevention).

Avoidable deaths affect Maori and Pacific disproportionately



Diabetes affects 5.5% of WDHB's population, increasing with age and disproportionately by Ethnicity



The key disease burden considerations from the Health Needs Assessment[8] (HNA) for WDHB services to consider are:

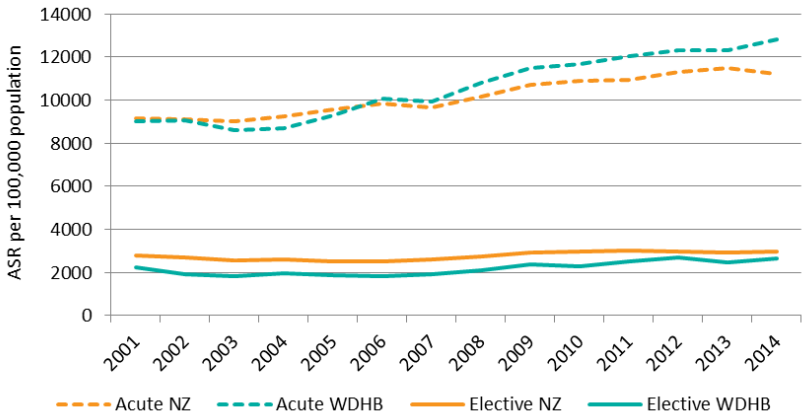
[8] http://www.waitematadhb.govt.nz/DHB-Planning/Health-Needs-Assessments/2015-Health-Needs-Assessments

- **Cancer:** In 2011 this was the leading cause of death in WDHB with 919 deaths which was approximately 31% of all deaths in Waitemata (with the most significant being lung breast and colorectal cancers). Approximately 30-35% of cancers are caused by modifiable risk factors and are avoidable
- **Cardiovascular diseases:** Cause the second highest number of deaths in Waitemata (793 in 2011) and as much as 70% of cardiovascular disease is potentially avoidable
- **Stroke:** In 2014, 854 Waitemata residents were admitted to hospital following a stroke, the mortality rate from stroke is 26.2 per 100,000 (2012), lower than the rate for New Zealand as a whole. Prompt assessment together with effective treatment and rehabilitation is essential in providing the best outcomes for these patients
- **Diabetes:** The number of people with diabetes has more than doubled since 2003 and is estimated to affect 31,000 (5.5%) of WDHB's population. If the number with diabetes continued to rise at current rates, it would affect 20% of the population in 20 years' time
- **Obesity:** Data from the New Zealand Health Survey reports that one in four of WDHB's adults are obese and over half are overweight. Approximately half of WDHB's population is meeting daily exercise recommendations and 55% are meeting the daily fruit and vegetable consumption guidelines. For children, the rate of obesity in WDHB's Māori and Pacific population is high with 11% of Māori and 23% of Pacific 2-14 year olds considered obese
- **Mental ill-health:** Nationally mental health affects one in five people each year with 16% reporting depression, anxiety or bi-polar disorder compared to 12% of WDHB's residents (equivalent to around 50,000 people). Approximately 3% of WDHB's population (17,000 people) accessed secondary mental health services in 2013. Young adults (14-44) and Māori are particularly affected by mental health conditions, with the Asian population having very low utilisation rates. Additionally, the NZ disability survey within the HNA highlighted that 59% of people aged 65+ have a disability and that 7% may be suffering from dementia, which rises to 25% for those aged 85+. People with mental illness also have a tendency to have a significantly shortened life expectancy, typically due to high rates of comorbidity with cancer, respiratory and cardiovascular diseases

Growing demand for hospital services, limited current capacity

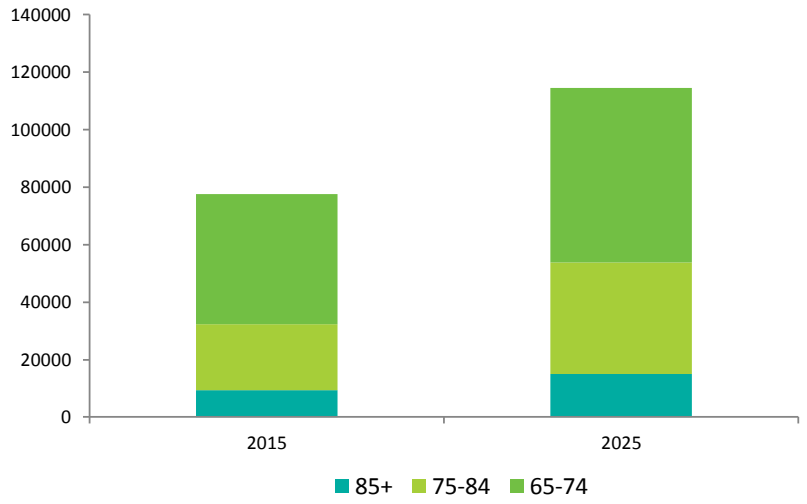
Between 2001 and 2014, national demand for hospital services has increased significantly, with acute events at WDHB growing faster than the rest of the country. Future population growth and constraints on funding will continue to place pressure on hospital services.

Demand for hospital services in increasing



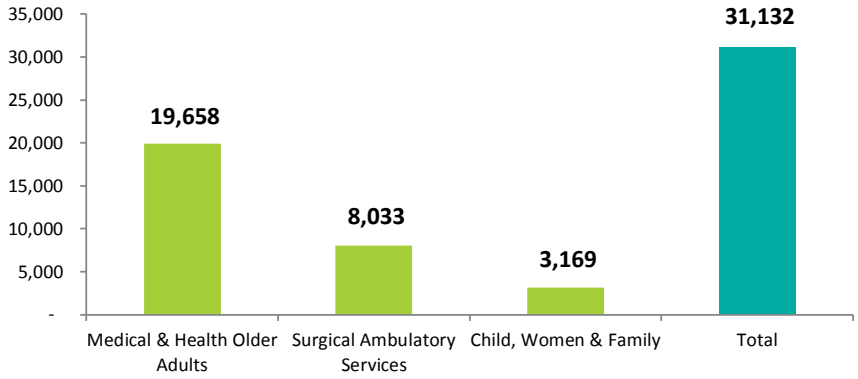
The large majority of older people in WDHB are able to live unassisted in their own homes. 60% of people who are 85 years or older receive no funded living assistance, while 14% are funded to live in a rest home or private hospital, and 26% have some funded support at home. Older people have greater need for health services and hospital care and occupy about 45% of WDHB's medical/surgical beds. With the projected increase in the population aged 65 and over, meeting the associated increase in demand for health care will be a defining challenge over the next 10 years.

WDHB's 65+ population will increase by 47% by 2025 and WDHB's 85+ population will increase by over 60%



This increase in demand has put increasing pressure on services and facilities that have limited capacity, staffing, and run historically at high levels of bed occupancy. A number of services highlighted demand tipping points are upcoming or already passed in terms of staffing or facilities, emphasising the need to plan and develop hospital services to manage this demand.

There are a variety of opportunities to attain bedday savings, with the majority within the MHOP and SAS Divisions[9]

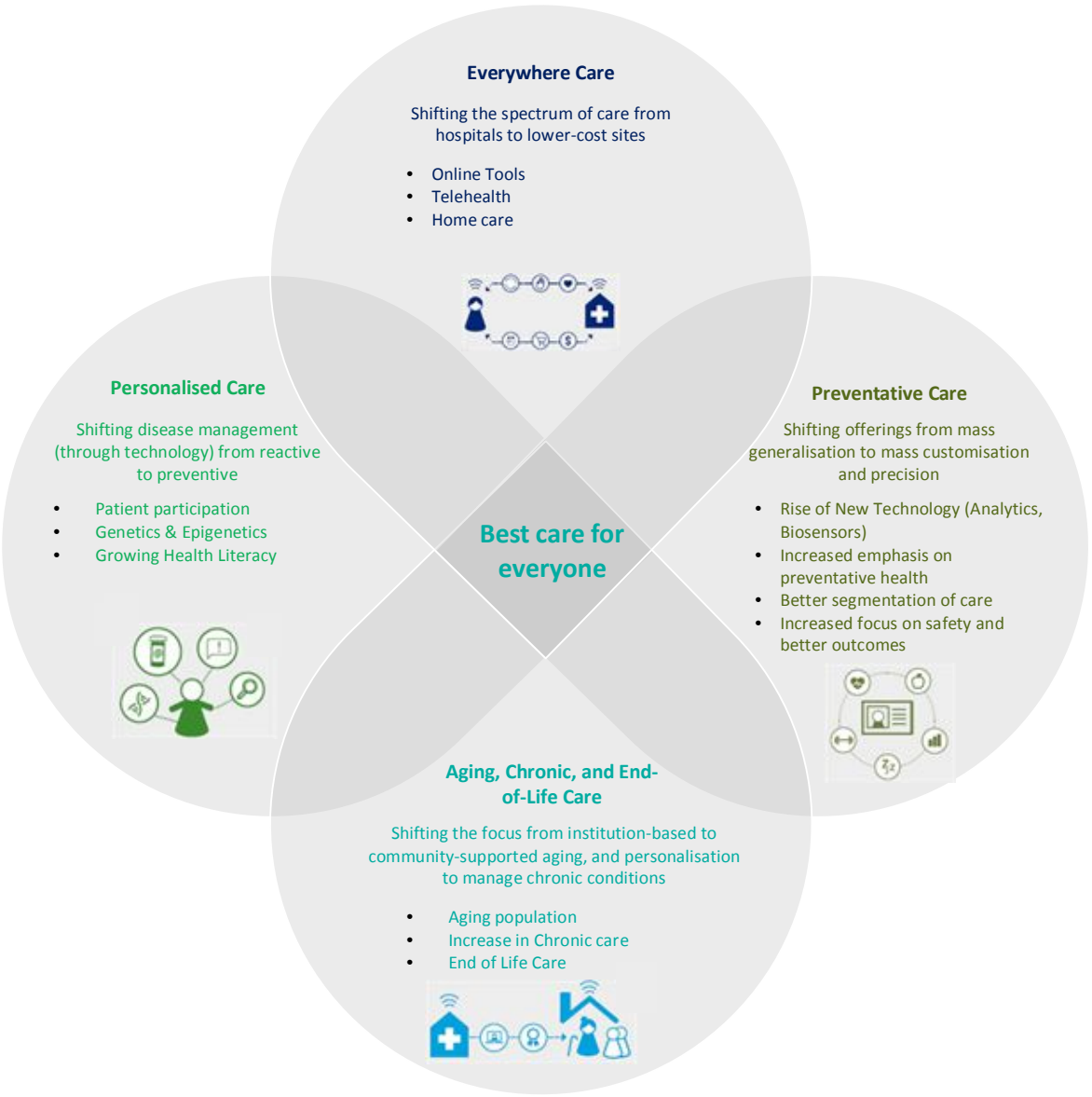


Any push for length of stay effectiveness will need to be balanced against maintaining the highest level of quality and care for patients, but both benchmarking and anecdotal evidence from workshops indicates there are beddays savings that could be achieved through better collaboration between services and ability to move patients out of beds when clinically appropriate.

[9] Taken from the HRT bedday savings report (April 2014 – March 2015).

Global challenges and megatrends

Globally, the very definition of health care is changing from one which is characterised by institutional care provided to the sick to one focused on the broader management of health – bringing to the fore practices of preventative care, data driven decision making, mobile health and consumer centricity.



Mega-trends in health service delivery and the potential implications for WDHB

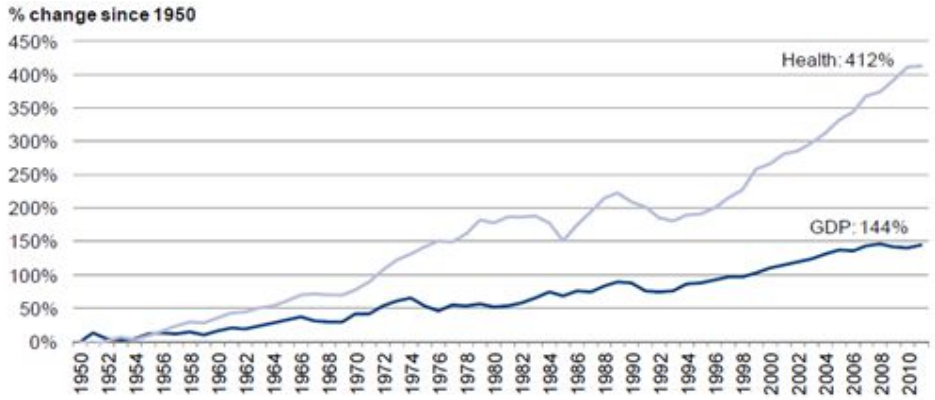
Megatrend	Sub trend	Description
Personalised care – *Shifting offerings from mass generalisations to mass customisation and precision*	Patient participation	Increasing focus will be given on delivering individual patient experience and co designing care based on patient journeys rather than service needs. Patients will expect 'choice' in their healthcare experience
	Growing health literacy	Linked with growing availability of health information, patients are increasingly informed and seeking collaborative solutions
	Genetics & epigenetics	Exponential decrease in genome sequencing cost and breakthroughs in epigenetics has led to increased use of targeted therapies

Megatrend	Sub trend	Description
	Rise of new technology (Analytics, Biosensors, etc.)	Many of these are already present globally and will include: new diagnostics, devices and wearables, additive manufactured 3D products such as organs, nano-medicine, pharmaceuticals, robotics (e.g. robots that care for the elderly), and artificial intelligence such as the recently physician certified IBM machine - 'Watson'
Preventative care – *Shifting disease management from reactive to proactive*	Increased emphasis on preventative health, wellness and self-care	Providing appropriate primary and community based services to increase wellness and reduce the need for hospital interventions will become increasingly important over the next 10 years to address growing demands
	Better segmentation of care	Boundaries between care settings will be increasingly disrupted with care settings becoming more highly specialised to clinical case mix and need
	Increased focus on safety and better outcomes	There is a growing trend towards quality improvement movement and reduction in variation of clinical practice
Everywhere care – *Shifting the spectrum of care from hospitals to lower-cost sites and in the patient's home*	Online Tools	Availability of information and health solutions are increasingly delivered online or via online communities
	Telehealth	Healthcare provision and access increasingly transcends physical location to meet the needs of patients
	Devolution of Care to Other Practitioners and non-traditional specialists	GPs, Nurse Specialists/Practitioners and other Clinicians are increasingly delivering care that is traditionally completed by secondary care specialists. This has been required to address specialist shortages and demand growth
	Home care	With technology and advances in monitoring, home health care may reach the levels of monitoring precision to that associated with inpatient ward hospital level care. Therefore, patients could be discharged earlier as long as monitoring and timely home care response / support is available
Aging, chronic, and end-of-life care – *Shifting end of life care from inpatient to outpatient*	Aging population	65+ population size doubling by 2034 and will form 20% of WDHB total population
	Increase in chronic care	Correlated with aging population and growing burdens of disease (e.g. diabetes), there will be an increase in chronic care presentations
	End of life care	Increasing importance placed on palliative medicine and ensuring appropriate settings for end of life care

Financial sustainability challenge

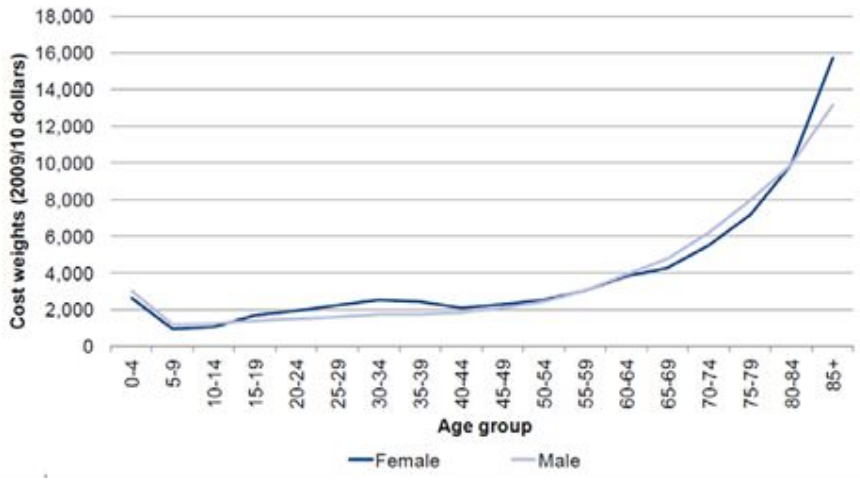
Over the last decade and across most developed countries, healthcare costs have outstripped both demographic and inflationary rates, driven primarily by healthier, longer living patients who consume exponentially increasing amounts of medical resource as they age[10]. The same pattern is true in New Zealand, where healthcare expenditure per capita is growing at a much faster rate than GDP (see the Treasury's graph below).

Core Crown health expenditure per capita and GDP per capita, indexed real growth,1950-2011



The graph below from the Treasury illustrates one of the major (although not only) drivers of this cost growth, with those above 75+ years consuming on average 8 times more cost than the <10 group

Health cost weights, by age groups, 2009/2010 dollars



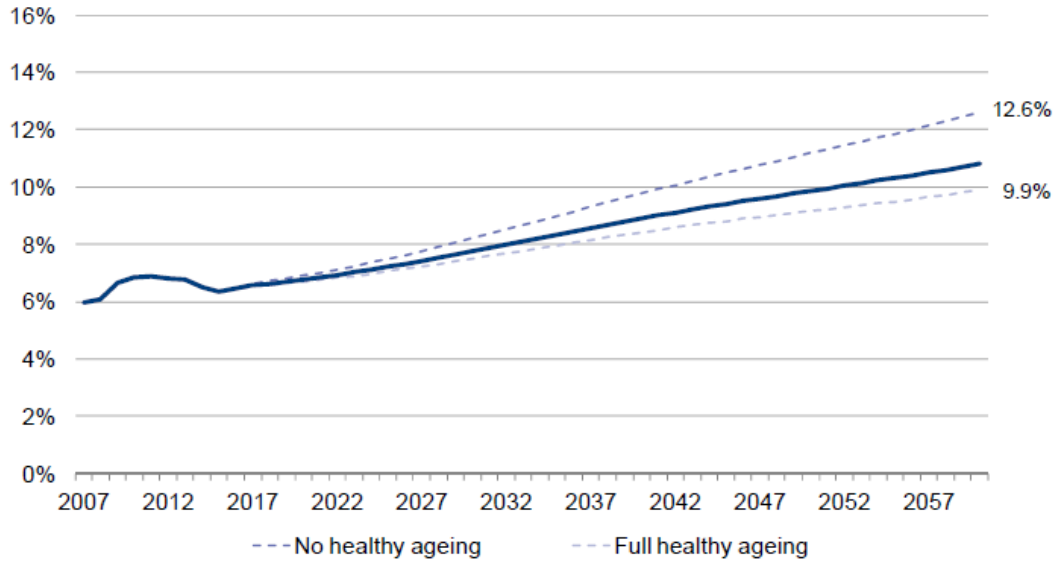
Given that, as noted above, WDHB's 65+ population will double over the next 20 years and the 85+ will increase by over 150%, this trend is unlikely to abate over the next 10 years, even considering ameliorating factors such as improving technology, outcomes, and interventions. Inevitably therefore prioritisation and effectiveness will become an increasing prerogative in healthcare management, as will demonstrating value for money and outcomes.

The Treasury's series entitled 'Affording Our Future' illustrates the sector wide challenge, with medical costs estimated as growing from just over 6% of GDP currently to somewhere between 9% and 12% by 2050. The 3% difference demonstrates the potential impact of an aging population, with a higher range representing an

[10] http://www.treasury.govt.nz/government/longterm/fiscalposition/2013/pdfs/ltfs-13-bg-lhppo.pdf

'expansion of morbidity' scenario (no assumption of 'healthy' aging) and the lower range representing a 'compression of morbidity' scenario (assumes that growth in costs associated with an aging population will be offset by improved outcomes).

Healthcare spend as a % of GDP changes significantly based on healthy ageing assumptions



WDHB wide challenges

The Provider also faces a number of challenges as it prepares to navigate towards the future. While a number of these challenges are currently being addressed, the key issues are identified below so that a complete view is provided in this HSP:

- **Responsive but challenging physical footprint:** The provision of a geographically distributed facilities footprint enhances accessibility and experience for WDHB's population but the costs and potential inefficiencies of managing service delivery across multiple sites (including the required support services) continue to be challenging
- **Fit for purpose buildings & infrastructure:** There are a number of services where the existing building and services is not assessed to be 'fit for purpose' for delivery of high quality healthcare services. This is currently being assessed and prioritised for remediation
- **Siloed services planning:** a major theme from the Divisional workshops was that services planning, facilities development, and model of care changes are often conducted within Divisional silos, with the impact on other services and key support services often not embedded within the planning process
- **Data and information technology:** WDHB's technology infrastructure and supporting applications do not support mobility or access across the different settings of care to provide a more joined up health system. There are a number of activities such as consult liaisons that are not currently tracked or accounted for
- **Data centric culture and adoption:** There is a strong desire by clinical and other staff to have access and a good level of understanding of WDHB's clinical, costs and decision making data but data quality is generally poor unless the data is actively manipulated to cleanse the information
- **Ability to plan beyond the short term:** WDHB has invested in its people, particularly through its values, leadership, education and culture programmes. However, the focus of organisational planning continue to be on the immediate term and this can constrain the ability to plan for these longer term challenges
- **Funding & budgetary process:** The Provider currently does not have the information available to understand the efficient costs of delivering services in the current service and site configuration. Funding and incentives are not always aligned to outcomes and patient needs
- **Lack of flexibility in current footprint and high utilisation of services:** in addition to not necessarily being 'fit for purpose', facilities across the DHB are at capacity with high bed utilisation and waiting lists for high demand outpatient services. This has historically limited the Provider's ability to 'flex' and effectively allocate its resourcing
- **Training for junior staff versus push for efficiency:** WDHB needs to find models to support the longer term strategic objective of remaining a major site for training, while ensuring WDHB is leveraging SMOs and other clinically skilled specialists in an effective manner. Additionally, training expectations and requirements have largely increased over the last 10 years, and this growth needs to be incorporated in future planning

Section 3: Definition of strategy and direction in 2025

This Section sets out the initial direction to 2025 and the strategic 'end-state' that Waitemata aspires to achieve within the ten year timeframe. It also addresses what the future would look like in the absence of substantial change (i.e. base case or status quo), what new service provisions and developments are viable to occur by 2025, and what the identified trends and responses were from the service workshops.

Policy directions

The sub-sections below provide an overview of the government policy which guides healthcare provision for WDHB.

- **Ministry of Health's statement of intent 2014 to 2018[11]:** The Statement of Intent outlines the strategic direction for the Ministry, work that will be undertaken to deliver key priorities and how success will be measured. Success against the six national health targets is just one example of how the health system continues to improve outcomes for New Zealanders. The Ministry has a multi-faceted strategy, which includes:
  1. Contribute to the Government's strategic priorities by:
     - delivering Better Public Services within tight financial constraints
     - responsibly managing the Government's finances
     - supporting Christchurch
     - building a more competitive and productive economy
  2. Deliver on the Government's other priority actions through:
     - Supporting Vulnerable Children
     - Whānau Ora
     - the Prime Minister's Youth Mental Health project
     - health targets
     - Tackling Methamphetamine: An Action Plan
     - social sector trials
     - the Australia New Zealand Therapeutic Products Agency (ANZTPA)
     - Smokefree 2025
  3. Implement the Minister's objectives for the sector, which are to:
     - maintain wellness for longer by improving prevention
     - improve the quality and safety of health services
     - make services more accessible, including more care closer to home
     - implement Rising to the Challenge
     - support the health of older people
     - make the best use of information technology (IT) and ensure the security of patients' records
     - strengthen the health and disability workforce
     - support regional and national collaboration
- **New Zealand health strategy 2015 update[12]:** The current New Zealand Health Strategy was published in 2000 and requires a refresh. The updated strategy will set a new vision and a road map for the next 3–5 years for the health sector. The strategy is being developed in conjunction with two external reviews and will cover:

[11] http://www.health.govt.nz/publication/statement-intent-2014-2018
[12] http://www.health.govt.nz/about-ministry/what-we-do/new-zealand-health-strategy-update-and-associated-reviews

  - A review of health system funding[13], which looked at the arrangements to support a high quality health sector that integrates across the social sector and is sustainable in the long term
  - A review of health system capability and capacity[14], which will help ensure an adaptable and responsive health and disability sector is able to support the updated strategy
- **Northern regional health plan[15]:** The need to collaborate on a regional and national level has long been recognised in the NZ healthcare sector. Examples include the cardiac care network, and cancer care network, among others. This Northern Region Health Plan has been developed by the four northern DHBs and reflects contributions from primary care Alliance Partners. It provides an overall framework for regional planning and builds on previous years' work to demonstrate how the Government's objectives and the region's priorities will be met over 2014/15 and beyond
- **Workforce strategy[16]:** WDHB has the aim to strengthen the capability of its already committed workforce to allow for the greater use of evidence based clinical and corporate practice. WDHB is striving for a workforce that is committed to lifelong learning and development, is individually excellent, is trained to work in teams and can come together to ensure that Waitemata's population receives the best health care possible. An organisational environment which supports a "Healthy Workplace" is a key factor in achieving a workforce which reflects the qualities outlined. This document outlines the following areas; Workforce Data Intelligence, Capacity, Capability, Culture & Change Leadership and Employment Framework. Additionally, this strategy will need to address how the workforce will likely change as new models of care could implement new roles and responsibilities.
- **Regional information strategy[17]:** The Progressing and Transforming Health (PATH) initiative sets out the direction for health information in the northern region to 2020. Health information systems need to change to support new models of healthcare. The PATH strategy describes what this new health information system will look like, and what needs to be done to put it in place. It has been developed with the involvement of primary, community and secondary care and has been formally accepted by the region's four District Health Boards
- **Health needs assessment[18]:** The Health Needs Assessment describes the health of Waitemata residents compared to that of New Zealand overall, and on highlighting inequalities within the district and between particular groups of the population
- **Service specific policy documents:** Many of the services, including Mental Health, Oncology, Paediatrics, ED, and Obstetrics must adhere to Ministry led targets and policies. These have been considered and discussed during service workshops, and are outlined in Appendix 1.

[13] http://www.health.govt.nz/about-ministry/what-we-do/new-zealand-health-strategy-update-and-associated-reviews/funding-review
[14] http://www.health.govt.nz/about-ministry/what-we-do/new-zealand-health-strategy-update-and-associated-reviews/capability-and-capacity-review
[15] http://www.waitematadhb.govt.nz/Planning/Organisation-Wide-Planning/NRHP
[16] http://www.waitematadhb.govt.nz/DHB-Planning/Organisation-Wide-Planning/Workforce-Strategy
[17] http://www.waitematadhb.govt.nz/Planning/New-Developments/Regional-information-systems-plan
[18] http://www.waitematadhb.govt.nz/DHB-Planning/Health-Needs-Assessments/2015-Health-Needs-Assessments

Waitemata 2025 - A patient and Whānau centred health system that is working together to achieve the best outcomes for WDHB's population

Patient and Whānau self care

Patients and their Whānau are at the heart of this system and would make much greater use of technology to access health information, connect with others who are experiencing similar health challenges and engage in preventative care.

Primary

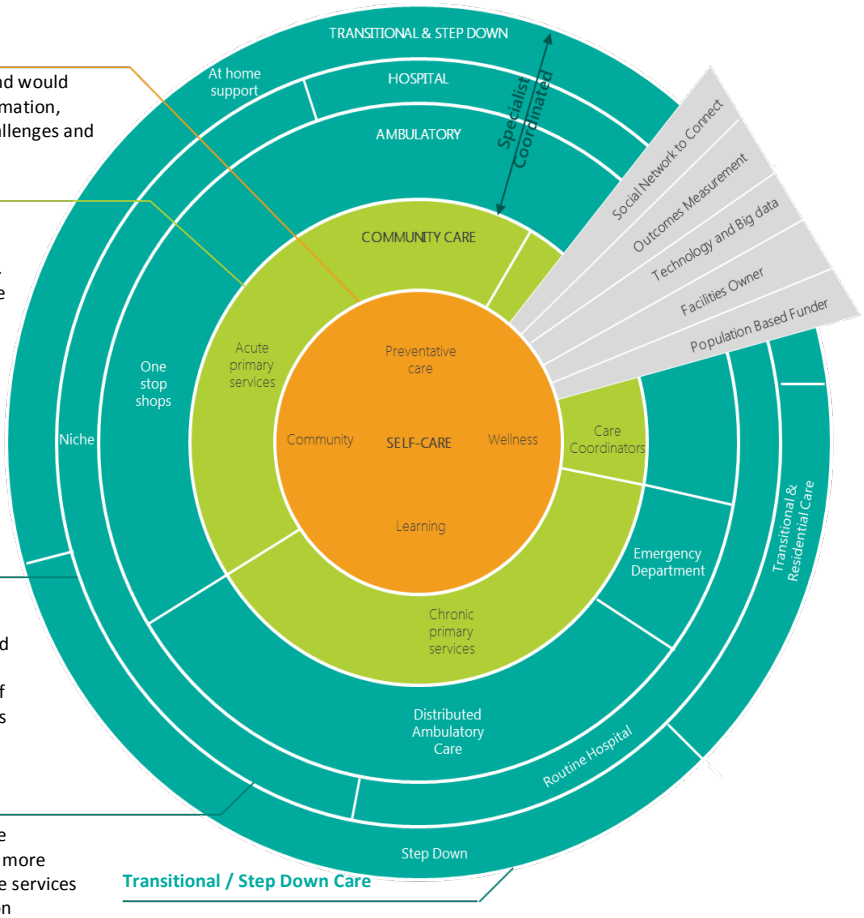
A multidisciplinary team coordinated by general practitioners works at this level. Services such as radiology, physio, and pharmacy are co-located or virtually connected. General practitioners have extended skills, performing more traditional secondary services, and can access support from specialists to inform treatment decisions. Primary care services will focus on what matters most and supporting patients to achieve the best possible outcomes, particularly in relation to management of chronic disease. There will be greater focus on multiagency and inter-sectoral coordination. Care Coordinators or Orchestrators are available for at risk, complex, and high needs patients, helping to navigate the system and ensuring broader health and social needs are met.

Ambulatory

The first of three specialist orchestrated levels of care. This level includes emergency medicine and 'one stop shops' established around particular conditions with diagnostic and treatment capability in a single site. These services may be accessed physically or through virtual methods. This level of care will refer to intervention or community care services as appropriate and support primary care providers to manage the patient back to a state of self-care.

Hospital

Hospital services would increasingly focus on more intensive specialist services. Hospital intervention will be shorter and more acute, with concentration of specialisation and assets. These services may be offered at a DHB or on a regional level, depending on volumes or level of specialisation required.
Where more intensive interventions are required, as decided by the specialist, services will be organised by 'routine' and 'niche' patient flows. Routine services are high volume relatively standardised interventions whereas niche services require a greater degree of expertise or support (e.g. cancer treatment for frail and elderly patient with mental health disease).



Transitional / Step Down Care

Following intervention, the specialist will orchestrate any community based care to support the transition back to a state of self-care. These include facilities offering rehabilitation, transitional and aged care as well as at home care services.

Waitemata 2025 fundamentally sees a transformation of the current healthcare system. Driven by changing demographics, cost pressures, technological developments and consumer preferences, the healthcare system of the future must reconfigure to operative effectively within these parameters. The result is a patient and Whānau driven health system, focused around the patient's well-being, and the need to be constantly learning and agile to meet the changing population demands.

Key participants in a networked healthcare system

- **Patients taking a more proactive role:** Using technology to access health information, connect with likeminded individuals and engage in preventative care and wellness practices
- **Carers:** the support people in a patient's life (family, friends, co-workers) who are in turn supported by 'trusted' educational and reliable information that can inform decisions about the healthcare of their 'patient' and provide a level of care without requiring patients to move away from their homes.
- **Care coordination:** In an increasingly complex system, coordination across services and sectors can help patients and their Whānau navigate and tie together various services so that they can better manage their own health and wellbeing. The extent of this coordination will need to go beyond just

connecting one care facility or physician to the next; consumers will need help in orchestrating a broader array of wellness and well-being solutions integrated into their daily lives—from social and preventive care to acute care and everything in between

- **Primary care network:** Primary care practitioners will be more highly involved in the healthcare journey of their patients, playing a focal role in their navigation of various services. The primary care network is more than the General Practice and includes multi-disciplinary teams, including secondary specialists who can provide liaison services to other providers in the network. General Practitioners with Special Interests (GPSIs) and other disciplines are also extending their skills to provide more traditional secondary based services in the primary care location. Additionally, there will be a split in chronic and acute care to allow for greater efficiency in dealing with similar patient cohorts
- **Other specialist community providers:** Organisations providing community based care facilities such as rehabilitation, transitional and aged care. These providers will take referrals primarily from tertiary and secondary care but there is no barrier to prevent referral from other sources where appropriate
- **'Routine' and 'niche' secondary care services:** Secondary care may be further split to distinguish between 'routine' and 'niche' services. Routine secondary services are high volume, relatively standardised services where niche services require a greater degree of clinical experience/specialisation or complex patient cohort
- **Tertiary specialists:** Tertiary care institutions offer services to treat the most complex health needs. Physical infrastructure is fundamental to the delivery of such services, and these providers are characterised by their skill, relatively low volumes of demand per population, specialist equipment/workforce and the facilities in which this care is delivered

Enablers of a networked healthcare system

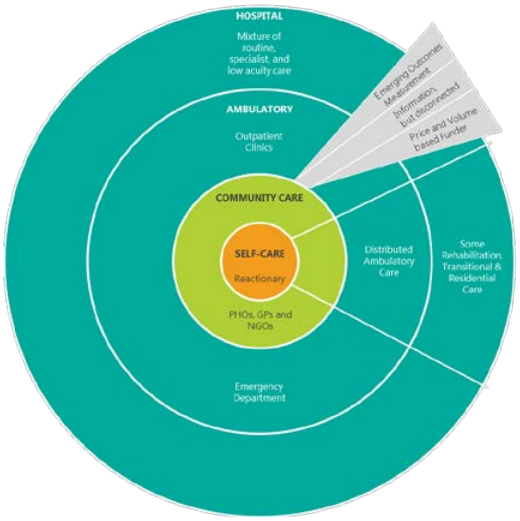
- **Social networks:** A medium for individuals, patients and carers to interact, share experiences and advice, form communities of interest around specific topics (such as music, sports, or meditation), and develop longer lived, trust-based (as opposed to transactional) relationships. The equivalent networks also exist for providers to interact with each other, sharing expertise to deliver greater service to consumers and patients
- **Research and quality outcome information:** There is a role in this health system for patients, carers and providers to be informed about new research and quality outcomes from trusted sources. This will continue to add to the overall health literacy as well as accelerating adoption rates to new changes in care that have been proven. Moderation of this content to increase the quality of information with specialist healthcare knowledge would be required to create a trusted platform
- **Focused on quality outcomes:** Outcomes are defined at an individual patient level and progress against these outcomes are regularly tracked and reported to the health system at a population level
- **Technology:** Technology systems enable communication between players and the sharing of patient data to provide the most suitable care for the patient and reduce duplication of work
- **Culturally diverse workforce:** Due to the diverse population within WDHB there could be an opportunity to support the development of a diverse workforce to ensure the needs of the WDHB communities
- **Infrastructure, buildings and capital:** There may be an opportunity to split the role of a service provider and asset owner. In this increasing costly and complex world, there may be a role for DHBs to own these types of infrastructure assets but the clinical providers can utilise these assets across the region wherever their services are required
- **Funder and population manager:** A funder and population manager who creates the right incentives for the health system to deliver best outcomes for WDHB's population. This may include incentives for patients and carers as well

- **Engagement:** Improving engagement across the health system is essential to enable a networked health system due to how interconnected the future will likely become

Key changes compared to current state configuration

The below diagram summarises the major shifts involved in moving from the generalised current state to Waitemata 2025. It should be noted that the degree of this shift varies by specialty and service, with some services such as Mental Health and Paediatrics already very successfully reconfigured and active in providing community, home, and ambulatory care.

Current state configuration



Waitemata 2025 configuration

Location and clinician centric models of care	Community, family / whanau and patient centric models of care
Emphasis and investment on treatment	Emphasis and investment on both treatment and keeping people healthy
Service replication	Service integration and/or consolidation
Information	Intelligence and insight
Inconsistent application of evidence	Consistent evidence informed decision making and practice
Inward focus and inflexible	Outward focus and flexible, service orientation
Emphasis on budgets & targets	Emphasis on operational and financial sustainability

Primary and community care emphasis

WDHB promises '**Best Care for Everyone'** and the priorities '**Better Outcomes'** and **'Enhanced Patient Experience'** reflect WDHB's aspiration to deliver the best possible care and outcomes for the population across the whole health care system. This requires WDHB to continue to develop an organisation wide culture that puts patients first, is relentlessly focused on quality improvement and is enhanced by strong clinical leadership. Primary care as the first point of entry to the health care system and where the majority of patient contacts occur is fundamental to achieving WDHB's Promise, Purpose and Priorities.

Waitemata has been at the forefront of many developments in primary care, has made significant investment in primary care, and is performing well on the primary care national health targets and Integrated Performance and Incentive Framework (IPIF) measures. WDHB has a well-regarded skin lesion service run by general practitioners, WDHB were one of the first DHBs in the country to fund CVD risk screening, community podiatry and to have retinal screening in the community.

In 2015/16, the DHB will build upon and complement existing integration developments, with a focus on:

- Embedding strong relationships between the DHB and primary care through the District Alliance and working with PHOs to jointly implement the Integrated Performance and Incentive Framework (IPIF)
- Improving diabetes and CVD outcomes through collaboration with primary and secondary care services by using the intervention logic model
- Improving performance through quality improvement and transparent reporting
- Piloting and evaluating the Co-ordinated Case, Assessment, Rehabilitation, and Education (CARE) initiative
- Establishing connections with other public and social services to enhance cross-agency collaboration
- Release of expertise within the hospitals to better support primary care and NGOs, to increase the care delivered in community settings
- Building capability and capacity across the healthcare system, particularly primary care
- Developing innovative funding models that enable and support sustainable service change
- A focus on Māori, Pacific and other high need populations and identifying their health needs

The details of these primary and community based care plans will need to be worked through in greater detail in further phases of this HSP.

Health inequalities

As noted in Section 2, a key ongoing health concern for WDHB is the proportionally poorer outcomes experienced by some patient populations, most notably Maori and Pacific residents. While the major causes of health inequalities largely lie outside the hospital services, hospital services have an impact to play. Waitemata currently has dedicated teams for both Pacific and Maori health, as well as an Asian health services team. The Pacific Health team has a regional focus and its plan "Pacific Plan for a Long, Healthy Life" articulates six key priorities that link with the four biggest disease burdens for Pacific people in the Auckland region (Obesity, Smoking, Diabetes, Cardiovascular disease). There is a WDHB 2015 / 16 "Maori Health Plan" focused on key outcomes as well as a Maori Health team with an operational focus on supporting clinicians with social support, Whānau ora assessments, and a range of other services.

The speciality and service level responses to improve health inequalities in these populations, includes:

- Having culturally appropriate workforce to increase engagement
- Working on communication and translation services
- Continuing to focus on Did Not Attend (DNAs) and access rates
- Continuing to implement and monitor ethnicity specific health metrics per service
- Understanding and addressing inequalities in hospital outcomes, for instance an audit is currently underway looking at inequalities in outcomes

Where further work is needed is on how the above plans and their associated community and primary partners will work in conjunction with hospital services to materially improve key outcomes, and how ongoing work with patient cohorts as part of the Richard Bohmer workstreams addresses the same. This will also need to include more research and insight into understanding and assessing the underlying patient experience, access barriers, and modifiable factors influencing inequalities in health.

Finally, while on average Asian ethnic health measures indicate higher than average outcomes, the substantial growth in Asian populations across WDHB merits further work to understand the impact of a 5% proportion shift (from 20% in 2015 to 25% of total population) on disease profile and incidence, as well as the culturally driven differences in preferred ways of engaging with and consuming health services. Studies by academics and the NZ Race Relations office have continued to highlight a strong level of prejudice experienced by the Asian community. This is a group that is often unable or unwilling to raise these issues or to articulate adverse patient experiences. An updated Asian Health Needs Assessment is currently underway at WDHB which will provide further insight into these services.

This work is articulated as an important 'Next Step' of this HSP, and links strongly with planned community and primary services planning.

Estimated projections (base case or status quo)

This Section provides an indicative understanding of what the impacts would be if WDHB continued forward to 2025 without any major changes – i.e. with largely the same models of care and overall footprint. The focus in this period is to understand what the impact is on inpatient and outpatient volumes, workforce mix, patient flows, and financial costs. These forecasts are based on forecasted demographic data from StatsNZ and where this is unavailable, growth based on previous years.

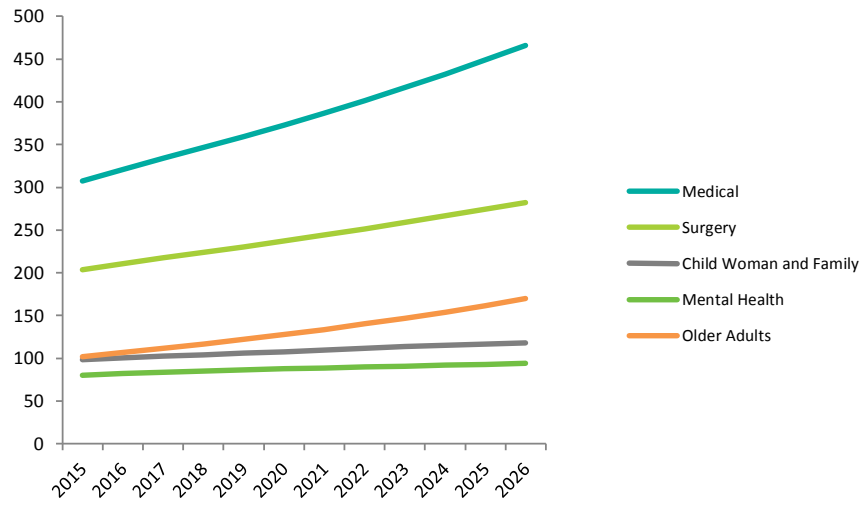
Projections indicate sustainability concerns across all the above variables. In summary, there will be an estimated bed deficit of 330 across all services (234 across Medical, Surgical and ESC) by 2026 and a 33% estimated increase in outpatient volumes. Staffing would also need to increase substantially to support this activity growth, as flows from WTH to NSH could increase by up to 17% and the flow of WDHB patients to other providers could increase by an additional 4,165 events. Financial sustainability would be a serious concern, with an estimated annual deficit of $200m to $700m depending on variables considered. Additionally, if the workforce maintained its current proportion of staff to events WDHB would require an additional 102 SMO/MOSS/Registrars, 490 Nurses, 261 Allied Health staff and 190 Support and Management staff by 2025.

Inpatient forecasts

Under the base case as the population increases and the incidence rate remains static there will be increased volumes within the inpatient setting creating an increase in the utilisation of current beds and a need to create additional beds required by 2025. This has already started to occur with the utilisation of Medical and Surgical beds between 2012 and 2014 growing at an average of 5% for Medical and 3.5% for Surgical. In addition to this WDHB will have to manage a growing and ageing population in the next 20 years which will impact on bed demand.

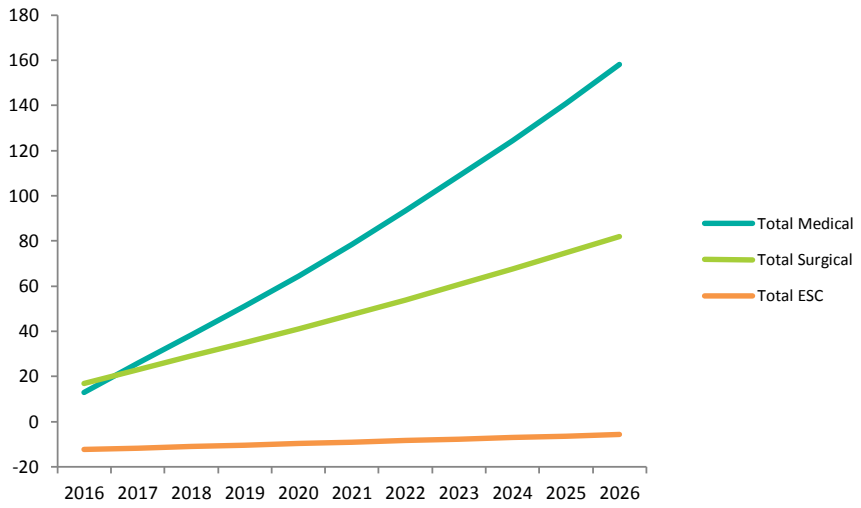
Projected beds were calculated by taking historical bed-day data and projecting forward required beds by using projections for WDHB produced by StatsNZ. With this base of historic bed-day data, age-adjusted population growth (from census population projections) was applied to project future required beds.

Predicted WDHB inpatient beds to 2026



It is expected that 1,131 beds will be needed across Medical, Surgery, Child Woman and Family, Mental Health and Older Adults by 2026 for both Overnight and Sameday beds. This will result in an expected bed deficit of 234 across Medical, Surgical and ESC and 336 across all Services by 2026 if the growth pattern remains unchanged, requiring significant planning to ensure that the supply of beds meets demand.

Predicted WDHB bed deficit to 2026



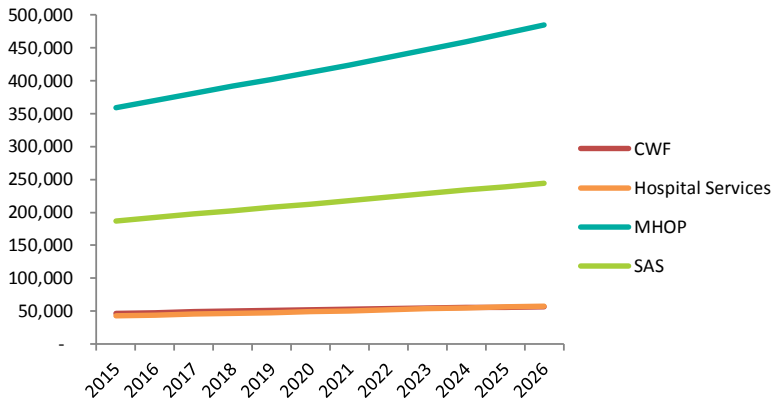
Outpatient forecasts

Under the base case as the population increases and the models of care remain static there will be substantial increased volumes within the outpatient setting. This estimate does not take into account shifting volumes out of the inpatient setting, burden of disease related change, or further model of care related changes. Outpatient volumes were forecasted by taking FY 14 / 15 WDHB NNPAC[19] volumes for pre-admissions, followups and first specialist appointments and increasing them based on age and year growth assumptions produced by StatsNZ.

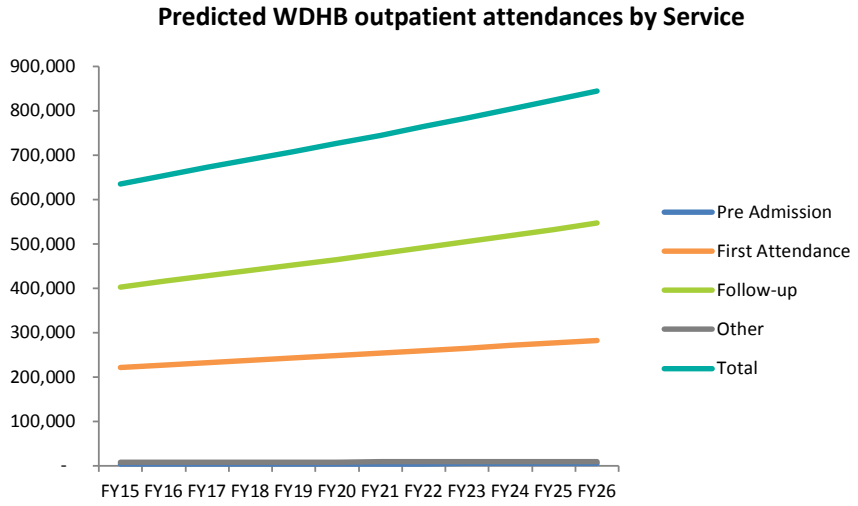
There will be an expected growth in outpatient volumes of 33% from 634,704 to 844,206 attendances. The largest growth is expected to come from Pre Admissions (42%) followed by Follow-ups (36%) which will likely require the expansion of current WDHB outpatient facilities to increase capacity if the current pattern of growth remains unchanged. Additionally, by 2026 it is forecasted under the base case that for every 'First Attendance' there will be 1.9 'Follow-Up' attendances (up from 1.8) by 2026 which will put considerable strain on the resources of WDHB's outpatient services.

MHOP is expected to have the largest number of Outpatient attendances by 2026, followed by SAS with the next largest growth in attendances coming from Hospital Services (36%) and MHOP (35%).

Predicted WDHB outpatient attendances by Division



[19] National Non-Admitted Patients Collection (NNPAC)



Workforce impacts

Many services noted in consultations that workforce and staffing is currently stretched to accommodate demand in the current state, and with the estimated increase in both Inpatient and Outpatient the pressure on workforce would be a serious challenge and likely lead to unsustainable staffing requirements. Detailed FTE forecasts are difficult to estimate at a high level as the requirements and roles vary drastically between specialities and services; detailed workforce design will need to be conducted in subsequent phases of the HSP.

However, taking a basic FTE to inpatient discharge ratio with the same intervention rates, as the population and activity volumes increase it would indicate that by 2025 there would need to be an additional 102 SMO/MOSS/Registrars, 490 Nurses, 261 Allied Health staff and 190 Support and Management staff required to maintain the current level of support. Additionally, there will be workforce supply and retention challenges with the current workforce models as other DHBs and private facilities compete for junior (graduates) and experienced staff to offer a holistic package of care. As an example, the number of implied additional RMO FTEs for Medicine and Health of Older Persons would be 18.5, which represent an unsustainable increase.

Patient flow impacts

Between DHBS: Inter-district flows (IDFs) occur for a variety of reasons. These can be due to service configuration (e.g. services that are not currently offered at WDHB), or due to the accessibility or close proximity of acute services offered by other DHBs in the region (e.g. patient choice or necessity due to the closest DHB at the time of an acute event). As the DHB's population grows over the next 10 years it is reasonable to expect that IDFs will also increase associated with this growth. Historical IDF trends would suggest that this increase will be proportionally less than the overall demographic growth of the DHB's population. However if IDF flows to other DHBs continue at the current rate and growth occurs at a rate consistent with demographic growth, it is expected that an additional 4,165 events will go to other DHBs each year by 2025 resulting in a total IDF flow of 27,977 events.

Between NSH and WTH: Flows from Waitakere Hospital to North Shore Hospital will increase as the population in the West grows in the next 10 years as WTH is not currently configured to provide complex / high acuity services and will likely not do so in the future under the base case. For example, at present there are 3,343 events where patients arrive at the WTH ED and must be transferred to the NSH ED. By 2025 this could increase to over 3,927 events, a 17% increase.

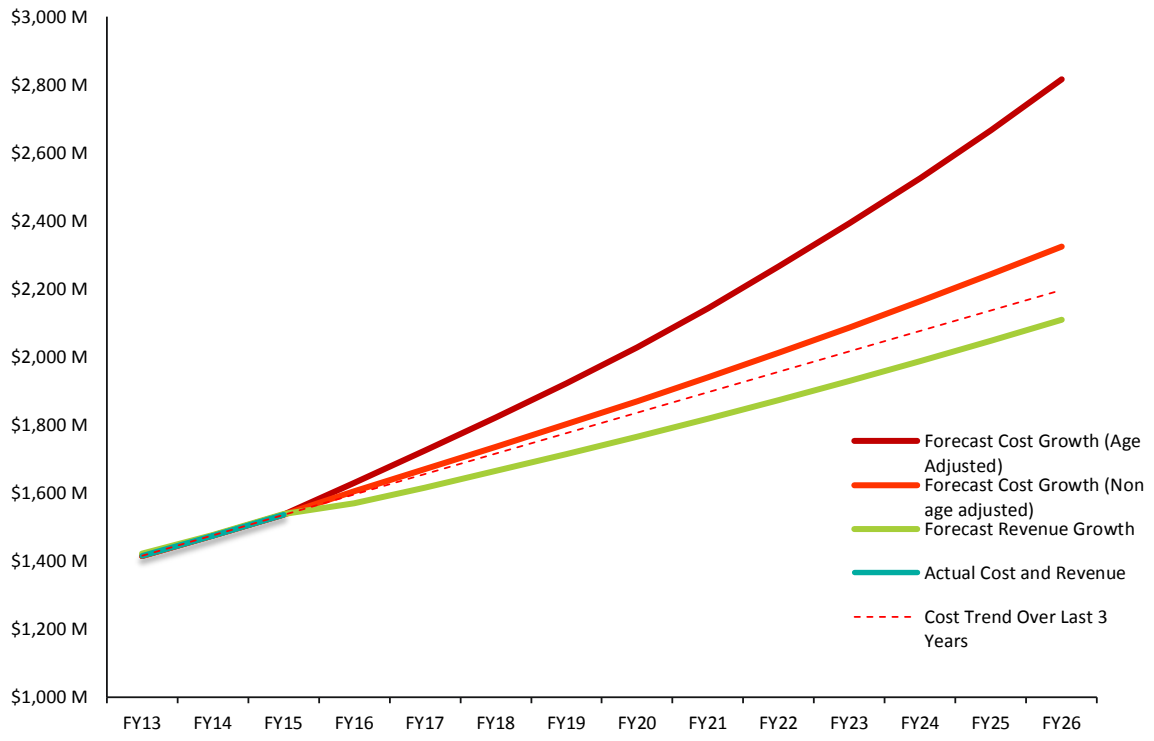
Between services: Patient flows between services will become increasingly complex, with a growth in particular in liaison services and required consults. These figures are not currently tracked by services and so concrete estimates cannot be provided. More holistic and multidisciplinary models of care would consider treatment pathways for patient cohorts (e.g. diabetes patients who become renal patients) and increase communication and referrals within the DHB.

Financial sustainability

Using activity based cost data across the range of services managed by the DHB, a high level forecast has been completed identifying how both cost and revenue is expected to change over the next 10 years. This was produced by growing General Ledger line item costs by establish medical indexes for inflation, predicted demographic growth rates (including being weighted for higher growth in the 75+ bracket), and government and crown predicted revenue growth rates.

It is expected that there will be a significant deficit by 2026; if revenue increases at a rate of approximately 3% per year over this time frame and cost are forecasted based on their average growth over the last three years of 8.5% over the same period, WDHB will reach a yearly deficit of $89m by 2026 (the dotted line in the Figure below). However, once more rigorous assumptions such as costing inflation and population growth are taken into account there is an expected deficit of $216m by 2026. Additionally, once the costs are further refined through including a weighting for higher growth in the 75+ bracket and their respective higher cost as a demographic there is an expected deficit of $707m.

WDHB cost v revenue projections to 2026



Note: Forecast Cost Growth (Age Adjusted) refers to the weighting in costs related to the increase in over 65+ population, while non age adjusted has no age weighting.

The above results coupled with the Treasury forecasts noted in Section 2 highlights the challenge facing WDHB and the broader sector over the next 10 years, as well as the need to devise financially sustainable solutions well before 2026.

Potential services development to 2025

Critical to Waitemata's growth over the next 10 years is a consideration of what services should be grown and developed across its major sites to meet the needs of a 700,000 population catchment by 2025.

To systematically complete this exercise, the New Zealand Ministry of Health Role Delineation Model (NZ RDM) from 2010 was utilised as a base for identification of key services requiring change if Waitemata 2025 is to be met. The outputs of this analysis are tested against key findings from the Service Workshops, Senior Management Team (SMT) retreat and Inter-District Flow (IDF) activity analysis.

The New Zealand RDM has been developed to allow for the differentiation of complexity between services within and across District Health Board providers. It does not match service intensity to service need – that is, it is not a quality framework; rather, it is a descriptor of the spectrum of complexity within which services can be provided. It is utilised in this HSP to describe the actions required to move WDHB from its current state to Waitemata 2025 at the two major hospital sites of North Shore and Waitakere Hospital.

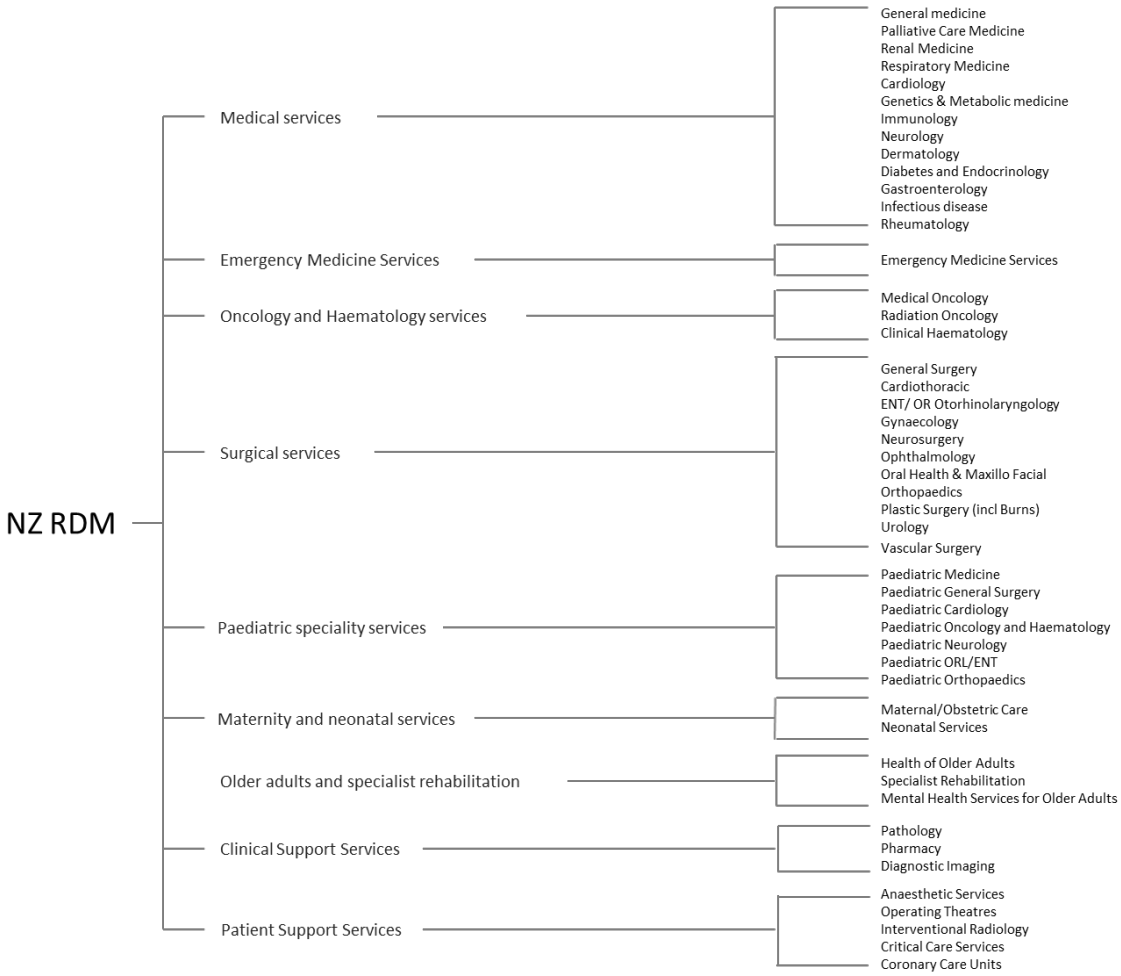
The 2010 New Zealand Role Delineation Model (RDM)

The RDM ranks services, grouped across nine service and support categories, according to a gradation of six levels of complexity. The figure below illustrates the levels of complexity specified under the RDM.

Summary of the RDM levels with feasible level shifts by 2025

The ranking is broken down by sub-service category and is completed at the facility level. The mapping of sub-service categories to service categories as per the RDM is provided in the figure below. **Important absences in the NZ RDM include mental health and commercial support services such as Food and Linen, and these will need to be included in future planning.** Each facility is able to be ranked at the level of a sub-service, which can be rolled up to represent a ranking against a service category, which can then be aggregated up once more to represent the overall ranking of the facility.

Structure of the NZ RDM



The delineation of a sub-speciality is determined on a multi-criteria analysis against five factors:

Hours of Access	The hours a service is available to receive patients is a marker of capability. The hours range from normal working hours to after hours and include on-site & on-call cover
Clinician Characteristics	The model focuses primarily on the medical hierarchy. This is driven by the medical model being easily verified and having a significant correlation with complexity
Interspecialty Relationships	Co-location with other specialties in addition to support services strengthens their ability to respond to increased patient complexity
Patient characteristics	The characteristics of the patient, best described by neonates and gestational age
Key Procedures or Treatments	Procedure Complexity (e.g. Bladder Reconstruction). Limited use and most likely at the most complex levels to differentiate definitive care providers

Identifying gaps between the RDM 2010 rankings and Waitemata 2025

Brought together, the outputs of the Service Workshops and the Senior Management Team Retreat see WDHB conceptualise itself in the future as equipped to provide a broad spectrum of services from comprehensive community based care through to specialised services.

The role of NSH will be to become a large local service provider with some dedicated sub-specialities to meet the needs of the catchment population – a **'level 4'** service (with the exception of Paediatrics which will move to a level 3). Having a 'comprehensive' level 4 facility will be essential to successful implementation of many of the model of care and patient cohort changes identified in this HSP, particularly to deliver the required growth in multidisciplinary, cross-speciality care for complex cohorts of patients.

The role of WTH in this spectrum is as a provider of acute and elective care to communities, that is, a **'level 3'** service as per the RDM. Given the very high growth in the western region of the DHB and the overall 'tipping points' already being experienced at both North Shore Hospital and Auckland Hospital, developing local service provision appears a necessary component of future development.

The respective levels above have been used to test the gap between current and potential future levels in the RDM, with the exception of General Medicine at North Shore Hospital which has been tested as a potential future level of 5 due to the high growth in volumes over the next 10 years (see Medicine below for further details).

The following points are essential to note as part of this process:

- Identified gaps do not necessarily imply 'repatriation' of services, but rather identify the key developments required to create sustainable and resilient services for WDHB's predicted state as the largest, longest living, and one of the fastest growing catchments in the country
- **The latest available assessment for the RDM is from 2010 – rankings will therefore need validation for services which have experienced growth and investment over the last 5 years**
- This assessment works from a point in time at Waitemata 2025, but does not specify timing of developments.
- This RDM is not a quality framework, a service specification or a facility planning tool. It assumes that a service has the necessary resources and infrastructure to support the service level. Therefore it specifically does not seek to: describe service models of care or be a service specification, reflect the resources that are required, or establish a service standard
- Although NSH and WTH are the focus of this initial analysis, the RDM often only specifies access and required support levels rather than location of services. Any development or service changes will need to be considered in the context of the overall services in Auckland.
- For NSH all support services are met in the RDM for the increase, but it was noted in workshops that all major support services are near capacity. Growth in services would likely push these past the tipping point and require further resource and facilities
- Linked with the above, the next steps in this process will be to establish viability of these gaps based on operational, financial, and regional considerations
- Some of the services below have had the viability column completed to reflect current thinking within the Provider arm. This will need to be carried forward and validated as part of detailed planning
- Rodney was not considered as part of the 2010 RDM assessment and was not assessed within this Section. It is recommended that conversations are held in order to determine what services and facilities will be provided in the Rodney community

At present, sub-specialities within NSH range between levels 1 and 6 and for WTH, between 1 and 3.

The table below provides an overview of the current and future ranking of the broader nine service categories for both facilities. The assessment which follows identifies the sub specialities requiring change to be aligned with the future ranking of the respective facilities[20].

NSH and WTH RDM 2010 and future ranking

	NSH						WTH					
Service category	**1**	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**
Medicine				●	○				●○			
Emergency Medicine					●○			●	○			
Oncology and Haematology	●			○			●		○			
Surgical Specialities				●○				●	○			
Paediatrics		●	○						●○			
Maternity and Neonates				●○					●○			
Older Adult Rehabilitation				●○					●○			
Clinical Support Services						●○		●	○			
Patient Support Services					●○				●○			

● RDM 2010 state; ○ Potential future state

[20] Note that all the RDM tables need further Service Validation over time as the RDM assessment was at 2010 and any subsequent service changes need to be reflected. In addition, the RDM is expected to be a guide rather than a rule for the type of support and ancillary services required to support different levels of speciality service provision. As this exercise may require a fair amount of service input, it will be completed as part of the next stage of the HSP evolution.

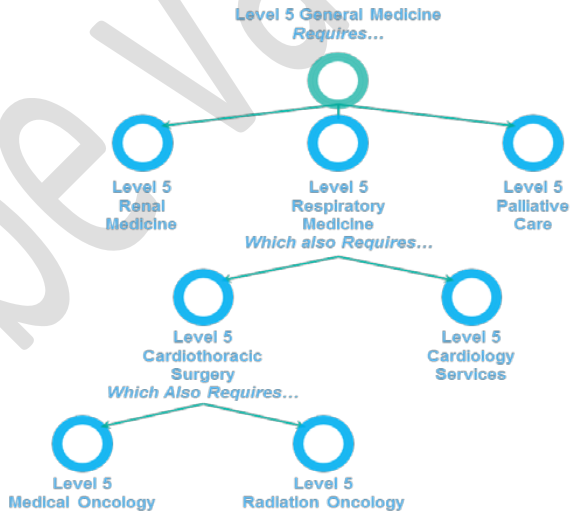
To be validated

Key Changes

North Shore

Potential developments on the North Shore hospital site are centred on two major shifts:

3. **General Medicine:** High growth in general medicine volumes and particularly in geriatric centred care indicates the potential need for at least one facility in the WDHB catchment that provides high volume, complex general care, which translates under the RDM to a level 5 General Medicine service. This was rereinforced in workshop sessions and current service development plans. This step change would also be integral to support 'lower level' facilities, including community and PHOs, in their care of the same patient cohorts. **The key changes associated with this are:**
    a. Development of related Medical specialties rosters, clinical scope, and access to support General Medicine development, including Palliative Care, Renal , Respiratory, and Cardiology
    b. Development of a Cardiothoracic service has been indicated as not likely to be feasible, therefore access to this (as well as access to a level 5 medical and radiation oncology service) would be needed for a level 5 General Medicine service
    c. In order to bring NSH up to a level 5 General Medicine service there is a large amount of work required across many specialities due to their interconnected nature. The below graph shows how many services must be brought up to a level 5 requiring significant investment in order for NSH to step change up to a level 5 General Medicine service. It is important to note that WDHB does not necessarily have to own and provide these services but appropriate access is recommended



To be validated

4. **Surgical Specialities:** Development of surgical services at North Shore to a 'high volume and medium patient complexity level', which translates under the RDM to level 4 ENT / ORL, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Plastic Surgery (incl. Burns), Urology, Vascular Surgery. The NZ RDM is relatively weak in its description of requirements for Advanced Interventional Radiology and this will need to be included in future service planning. **The key changes associated with this are:**

   a. Patient characteristics and key procedures / treatments
      i. Minor and intermediate procedures on low or medium risk patients for neurosurgery and plastics
      ii. Up to complex surgical procedures on medium risk patients for ENT / ORL, Ophthalmology, Urology, and Vascular
      iii. Complex diagnostic and treatment procedures on all risk patients including an acute aortic aneurism service

   b. Hours of access
      i. Normal working hours for Specialist plastic surgeons available normal working hours
      ii. On call and after hours provision for ENT / ORL, Ophthalmology, Urology, Plastics, and Vascular
      iii. Emergency and specialist oral health care for inpatients
      iv. Consideration given to develop a 24/7 interventional radiology service with adequate SMO cover

   c. Inter-speciality relationships
      i. Facilities for general anaesthesia for day surgery or longer admission
      ii. All other support services are met in the RDM, but it was noted in workshops that all major support services are near capacity. Growth in services would likely push these past the tipping point and require further resource and facilities

Note that these tables are being refined by the Services and also need further analysis to complete the last 3 columns (e.g. financial viability). They have been included to show additional areas to be completed.

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
Medicine	General medicine	**4 -> 5**	**H**	• Very high volume growth, particularly for older adults, indicates facility needed to deliver complex care • Medical Blueprint direction • Workshop feedback	• Consultations available from other medical sub-specialists which must include neurology • Planned access to Nuclear Medicine services, and provision of high-dose radiopharmaceuticals • Access to Level 5 palliative care, renal medicine and respiratory medicine services on site		*Yes*	
	Palliative Care	**4 -> 5**	**M**	• Required for Gen Med shift	• Formal links with oncology, radiotherapy, anaesthetics, psychiatry, multidisciplinary pain, clinic, rehabilitation and surgical services • Access to a level 5 General medicine service on site		*Yes*	
	Renal Medicine	**4 -> 5**	**M**	• Required for Gen	• All types of dialysis available		*Yes*	

Tuia Validated

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
				Med shift	• Renal biopsies performed • Inpatient admissions under a renal specialist • Specialist nephrologist, rostered normal and after hours • Access to a level 5 General medicine service on site			
	Respiratory	**4 -> 5**	**H**	• Required for Gen Med shift	• A comprehensive respiratory service • Specialist respiratory physician, rostered normal working hours and rostered on call after hours • Access to a level 5 General medicine, Cardiothoracic Surgery and Cardiology Services service on site		*Yes* *But unlikely Cardiothoracic will be developed*	
	Cardiology	**4 -> 5**	**M**	• Required for Respiratory shift	• Provides complex cardiology services including removal of pacing wires, cardiac biopsies and mitral & aortic valvuloplasty • Cardiac Catheter Laboratory on site • Access to a level 5 General medicine, service on site		*Yes*	
	Genetics & Metabolic	**3 -> 4**	**M**	• Increase to level 4	• Provision of an ambulatory genetic service • Services provided by an associate or certified genetic counsellor • Counselling and diagnostic services provided by a clinical geneticist in normal working hours		*It is likely ambulatory only will be developed*	
	Immunology	**1 -> 4**	**H**	• Increase to level 4	• Provision of an outpatient immunology service (on a visiting basis) • Immunology specialist available normal working hours		*No* *Workforce issues may not allow this*	
	Neurology	**3 -> 4**	**M**	• Increase to level 4	• Employ a specialist neurologist at all normal working hours		*Yes*	
Surgical Specialties	Cardiothoracic	**3 -> 5**	**H**	• Required for respiratory shift	• Thoracic and emergency cardiothoracic procedures (e.g. closed pulmonary embolectomy) provided • Thoracic/Cardiothoracic Surgeons rostered normal hours • Access to a level 5 medical and radiation oncology service		*No* *(Will likely IDF within the region)*	
	ENT/ORL	**3 -> 4**	**M**	• Increase to level 4	• Up to complex surgical procedures on medium risk patients • ENT/ORL surgeon available normal working hours and rostered on-call after hours		*Yes*	
	Neurosurgery	**3 -> 4**	**H**	• Increase to level 4	• Outpatient consultations by a neurosurgeon during normal working hours • Minor and intermediate neurosurgical procedures on low or medium risk patients • Neurosurgeon available for emergency consultations during normal working hours		*No* *(Will likely IDF within the region)*	
	Ophthalmology	**3 -> 4**	**M**	• Increase to level 4	• Complex surgical ophthalmology procedures on low or medium risk patients • Ophthalmologist on site normal working hours and rostered on-call after hours		*Initial plan was developed but currently being developed by*	

To be validated

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
					• Has Surgical Registrars or equivalent on site for extended hours and on-call overnight		*ADHB by mutual agreement*	
	Oral Health & Maxillo	**2 -> 4**	**H**	• Increase to level 4	• Emergency and specialist oral health care for inpatients • Facilities for general anaesthesia for day surgery or longer admission • Medical Officer or RMO rostered on site 24 hours		*Unlikely*	
	Plastic Surgery (incl. Burns)	**3 -> 4**	**M**	• Increase to level 4	• Up to intermediate plastic surgery procedures on low or medium risk patients performed • Specialist plastic surgeons available normal working hours • Has designated General Surgical Registrars or equivalent on site for extended hours and on-call overnight		*No*	
	Urology	**3 -> 4**	**M**	• Increase to level 4	• Complex urological procedures on low or medium risk patients • Urologists on site normal working hours and rostered on-call after hours • Has surgical Registrars, or equivalent, on site for extended hours and on-call overnight		*Yes Continue Regional*	
	Vascular Surgery	**3 -> 4**	**M**	• Increase to level 4	• Complex diagnostic and treatment procedures on all risk patients including an acute aortic aneurism service • Vascular Surgeons rostered normal hours and on-call after hours • Vascular Registrars or equivalent on site 24 hours		*Some Interventional Radiology*	
	Advanced IR	**TBD**	**TBD**	• **TBD**	• **TBD – RDM indicates North Shore is a level 5, but requires validation**			
Paediatrics	Paediatric Medicine & Medical Subspecialties	**2 -> 3**	**M**	• Increase to level 3	• Inpatient and outpatient specialist paediatric medical care for all children • Specialist paediatricians on site normal business hours • Medical Officer rostered on site 24 hours		*Depends on future development of Waitakare*	
	Paediatric General Surgery	**1 -> 3**	**M**	• Increase to level 3	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by General Surgeons. May be a visiting specialist paediatric surgical service • Medical officer rostered on site 24 hours		*Depends on future development of Waitakare Possible ADU/SSW Surgical assessment*	
	Paediatric Cardiology & Cardiac Surgery	**1 -> 3**	**M**	• Increase to level 3	• Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting • Level 3 Paediatric Medical Service		*No (Will likely IDF to ADHB)*	
	Paediatric Oncology & Haematology	**1 -> 3**	**M**	• Increase to level 3	• General paediatrician with an interest in paediatric oncology in normal business hours • Supports some outpatient paediatric chemotherapy		*Depends on future development*	

To be finalised

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
					• Participates in disease surveillance and late effects monitoring for children and adolescents		*of Waitakare*	
	Paediatric Neurology & Neurosurgery	**1 -> 3**	**M**	• Increase to level 3	• Provides a neurology outpatient consultation service by a neurologist. May be visiting • Provided by a Level 3 Paediatric Medical Service		*No (Will likely IDF to ADHB)*	
	Paediatric Orthopaedics	**1 -> 3**	**M**	• Increase to level 3	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service • Medical officer or RMO rostered on site 24 hours		*No (Will likely IDF to ADHB)*	
Oncology and Haematology	Medical Oncology	**1 -> 5**	**H**	• Required for Cardiothoracic shift	• Provides most inpatient and outpatient chemotherapy treatment • Inpatient beds available for admission under specialist medical oncologist • Specialist oncologists rostered in extended hours with rostered on-call for after hours • Has on-site access to Palliative Care Specialist support		*No (Unlikely Cardiothoracic will be developed)*	
	Radiation Oncology	**1 -> 5**	**H**		• Has access to full radiation treatment planning and support • On site linear accelerator • Inpatient beds available for admission under specialist radiation oncologist for all forms of complications • Radiation oncologists rostered in normal working hours • Is part of an on-site comprehensive cancer service including medical oncology, haematology and palliative care		*TBD*	
Older Adults and Rehabilitation	Specialist Rehabilitation	**2 -> 4**	**M**	• Increase to level 4	• Designated inpatient rehabilitation unit • Specialist Medical Officer with training in rehabilitation medicine responsible for patient care available normal business hours • Has dedicated inter-disciplinary teams with specific expertise in dedicated rehabilitation programs. May be orthopaedic, neurological etc.		*Yes*	

To be updated

Waitakere

Potential developments on the Waitakere hospital site are centred on two major shifts:

4. **Surgical Specialities:** Development of surgical services at Waitakere to 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 General Surgery, ENT / ORL, Gynaecology, Ophthalmology, Oral Health & Maxillo, Orthopaedics, Plastic Surgery (incl. Burns), Urology, Vascular Surgery. **The key changes associated with this are:**

   a. **Patient characteristics and key procedures / treatments**
      i. Up to intermediate ENT/ORL surgical procedures on low or medium risk patients. Excluding neuro-otic or intracranial surgery
      ii. Up to intermediate surgery on medium risk patients and some complex surgery on low risk patients for General Surgery
      iii. Intermediate procedures on low or medium risk patients and complex procedures on low risk patients for Gynaecology, Ophthalmology, and Urology

   b. **Hours of access**
      i. General surgeon rostered on site normal working hours and rostered on-call after hours
      ii. Medical Officer or RMO rostered on site 24 hours
      iii. ENT/ORL surgeon available normal working hours. May be part of a regional service
      iv. Specialist Gynaecologists rostered in normal working hours with rostered on-call for after hours
      v. Specialist care provided by dentists with specialist experience or by dental specialists during normal working hours
      vi. Urologist available normal working hours. May be part of a regional service

   c. **Outpatient**
      i. Outpatient consultations by plastic surgeon during normal working hours. May be visiting

   d. **Inter-speciality relationships**
      i. The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2), CCU to level 3 (from 2)

5. **Paediatric Specialities:** Development of Paediatric services at Waitakere to a 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 Paediatric General Surgery, Paediatric Cardiology & Cardiac Surgery, Paediatric Neurology & Neurosurgery, Paediatric ENT / ORL (Otorhinolaryngology), and Paediatric Orthopaedics. The focus is not to become as advanced as Starship Hospital but to provide a level of care expected for a DHB the size of WDHB. **The key changes associated with this are:**

   a. **Patient characteristics and key procedures / treatments**
      i. Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics
      ii. Except in emergencies, children under the age of one year are not admitted for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics

   b. **Hours of access**

To be validated

i. Medical officer rostered on site 24 hours
ii. Surgery performed by General Surgeons. May be a visiting specialist paediatric surgical service
iii. Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting
iv. Surgery performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours
v. Surgery performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service

c. Outpatient

i. Provides a neurology outpatient consultation service by a neurologist. May be visiting

d. Inter-speciality relationships

i. The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2)

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
Medicine	Immunology	**1 -> 3**	**H**	• Increase to level 3	• Provision of an outpatient immunology service (on a visiting basis)		*No*	
Emergency Medicine	Emergency Medicine	**2 -> 3**	**M**	• Increase to level 3	• Manages all emergencies including stabilisation and ventilation • Experienced Medical Officers trained in resuscitation rostered on-site 24 hours • Level 3 or higher general medicine, general surgery and paediatrics (unless children are diverted to paediatric ED)		*Yes*	
Surgical Specialties	General Surgery	**2 -> 3**	**M**	• Increase to level 3 • Needed for Emergency Medicine, Cardiothoracic, Neurosurgery, Ophthalmology, Plastic Surgery, Urology, and Vascular	• Up to intermediate surgery on medium risk patients and some complex surgery on low risk patients • General surgeon rostered on site normal working hours and rostered on-call after hours • Medical Officer or RMO rostered on site 24 hours • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*General Surgery only*	
	Cardiothoracic	**1 -> 3**	**H**	• Increase to level 3	• Access to a level 3 General Surgical, service on site • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*No (Will likely IDF within the region)*	
	ENT/ORL	**2 -> 3**	**M**	• Increase to level 3	• Up to intermediate ENT/ORL surgical procedures on low or medium risk patients. Excluding neuro-otic or intracranial surgery • ENT/ORL surgeon available normal working hours. May be part of a regional service • Medical Officer or RMO rostered on site 24 hours • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*No*	

To be finalised

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
	Gynaecology	**2 -> 3**	**M**	• Increase to level 3	• Intermediate gynaecological procedures on low or medium risk patients and complex procedures on low risk patients • Specialist Gynaecologists rostered in normal working hours with rostered on-call for after hours • Medical Officer or RMO rostered on site 24 hours • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*Yes*	
	Neurosurgery	**1 -> 3**	**H**	• Increase to level 3	• Access to a level 3 General Surgical, service on site • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*No (Will likely IDF within the region)*	
	Ophthalmology	**1 -> 3**	**M**	• Increase to level 3	• Intermediate ophthalmology procedures on low or medium risk • Ophthalmologist available normal working hours. May be part of regional service • Access to a level 3 General Surgical, service on site • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*Yes Hub/spoke WTH*	
	Oral Health & Maxillo	**2 -> 3**	**H**	• Increase to level 3	• Specialist care provided by dentists with specialist experience or by dental specialists during normal working hours • ICU Level 3 (from 2)		*Unlikely Regional*	
	Orthopaedics	**2 -> 3**	**M**	• Increase to level 3	• Minor and intermediate orthopaedic surgical procedures on low or medium risk patients • Orthopaedic surgeon rostered on site normal working hours and rostered on-call after hours • Medical Officer or RMO rostered on site 24 hours • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*Yes Only elective And non-complex acute* *Maintain some complex acute at NSH*	
	Plastic Surgery (incl. Burns)	**1 -> 3**	**M**	• Increase to level 3	• Outpatient consultations by plastic surgeon during normal working hours. May be visiting And/or • Minor procedures on low or medium risk patients by a plastic or general surgeon. May be visiting • Access to a level 3 General Surgical, service on site		*No*	
	Urology	**2 -> 3**	**M**	• Increase to level 3	• Minor and intermediate urological procedures on low or medium risk patients • Urologist available normal working hours. May be part of a regional service • Access to a level 3 General Surgical, service on site • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*No*	

To be updated

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
	Vascular Surgery	**1 -> 3**	**M**	• Increase to level 3	• Access to a level 3 General Surgical, service on site • The following services developed: Anaesthetics level 3 (from 2), ICU Level 3 (from 2), CCU to level 3 (from 2)		*No*	
Paediatrics	Paediatric General Surgery	**1 -> 3**	**M**	• Increase to level 3	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by General Surgeons. May be a visiting specialist paediatric surgical service • Medical officer rostered on site 24 hours • Anaes and ICU/HDU level 3 (From 2)		*Depends on Waitakare development*	
	Paediatric Cardiology & Cardiac Surgery	**1 -> 3**	**M**	• Increase to level 3	• Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting • Level 3 Paediatric Medical Service		*No (Will likely IDF to ADHB)*	
	Paediatric Neurology & Neurosurgery	**1 -> 3**	**M**	• Increase to level 3	• Provides a neurology outpatient consultation service by a neurologist. May be visiting • Provided by a Level 3 Paediatric Medical Service • Anaes and ICU/HDU level 3 (From 2)		*No (Will likely IDF to ADHB)*	
	Paediatric ENT/ORL (Otorhinolaryngology)	**2 -> 3**	**M**	• Increase to level 3	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours • Anaes and ICU/HDU level 3 (From 2)		*Depends on Waitakare development*	
	Paediatric Orthopaedics	**1 -> 3**	**M**	• Increase to level 3	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service • Medical officer or RMO rostered on site 24 hours • Anaes and ICU/HDU level 3 (From 2)		*Depends on Waitakare development*	
Oncology and Haematology	Medical Oncology	**1 -> 3**	**H**	• Increase to level 3	• Chemotherapy administered in a medical day stay facility • Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care • Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care		*Likely Ambulatory Local Service provision*	

To be Validated

Service	Sub-service	Step Change (2010 – Future)	Change required	Driver	Requirements for Step Change	Financially Viable	Operationally Viable *(initial)*	Patient/ Staff Experience
					• Level 3 General Medicine Service on site and improvement for: Anaesthetics level 3 (from level 2), ICU level 3 (from level 2), CCU level 3 (from level 2)			
	Clinical Haematology	**2 -> 3**	**M**	• Increase to level 3	• Basic haematology treatments administered in a medical day stay facility • Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care • Level 3 General Medicine Service on site and improvement for: Anaesthetics level 3 (from level 2), ICU level 3 (from level 2), CCU level 3 (from level 2)		*No*	
Older Adults and Rehabilitation	Specialist Rehabilitation	**2 -> 3**	**M**	• Increase to level 3	• Inpatient and outpatient specialist rehabilitation programs • Inpatient care in which the goal is functional restoration following an episode of trauma, injury and/or medical illness • Medical officers or RMO available on-site 24 hours • Senior Medical Officer of designated specialty (e.g. medicine, orthopaedics) available normal business hours		*Yes* *Offsite community*	
Patient Support Services	Anaesthetic Services	**2 -> 3**	**H**	• Required by a variety of surgical services	• Supports intermediate surgery on medium risk patients and complex surgery on low risk patients • Specialist Anaesthetist on site during normal working hours and on-call roster after hours • ICU and CCU Level 3 (from 2)		*Yes* *(Level TBC)*	
	Critical Care Services (ICU/HDU)	**2 -> 3**	**H**	• Required by a variety of surgical services	• Identified facility in the hospital is designated as either a HDU and/or ICU with clear admission and discharge policy • Provides mechanical ventilation and simple invasive cardiovascular monitoring and ionotrpic support for less than 24 hours • SMO with interest in intensive care rostered in normal hours Or • SMO cover for individual patients by other rostered specialty • Anaesthetics Level 3 (from 2)		*Yes* *In part*	
	Coronary Care Units	**2 -> 3**	**H**	• Required by a variety of surgical services	• Provides ionotropic support • Designated coronary care area • Specialist cardiologist on site during normal working hours • Anaesthetics and ICU/HDU Level 3 (from 2)		*Yes*	

To be updated

Potential services development impact

In order to quantify what the potential impact could be of conducting future service development, the total volume of Waitemata patients currently cared for in other DHBs was analysed (i.e. Inter District Flow volumes or IDFs). Removing those development areas deemed to be not operationally viable at this stage (particularly 'Neurosurgery', 'Specialist neonates'/'Paediatrics' and 'Cardiothoracic'), beddays were forecasted using StatsNZ population data to 2026 and then reduced by a further 20% to take into account higher complexity procedures that will continue to be sent to tertiary centres such as Auckland.

Based on this analysis, if the above services were developed to the required levels there could be an increase in 36,814 beddays by 2026, which equates to 101 beds. This is indicative only and should be used to facilitate discussions.

There will be a large number of additional beds required, especially for the SAS Division

To be validated

Identified trends and responses from the Services to 2025

Over 35 workshops were held across the Provider arm services to validate current state footprint, confirm current to short term issues and plans, and discuss key trends and changes anticipated over the next 10 years. These were used as essential inputs in the identification of key challenges and health needs by service, formulating the end state for Waitemata in 2025, and creating a realistic plan over the immediate term (i.e. next 0-3 years).

A number of common themes emerged from these workshops. These themes are outlined below, are spelled out in greater detail in the divisional tables within this Section, and have been used to develop the 10 year plan to WDHB to 2025.

Future State Change	Impact
Preventative focus	Focusing further on preventative conditions and presentation through enhanced education initiatives within communities and more proactive management of key preventative conditions before they reach an acute state
Personalised medicine	Growth in tailored (i.e. epigenetics) treatments will challenge current delivery models but provide an opportunity for enhanced patient outcomes
Patient cohorts	Cohorts of patients (e.g. frail and elderly, stroke) will require a similar set of services that could be consistently planned and delivered. Variations in care would be minimised
New workforce models, and working to the full scope of practice	The clinical workforce will require further development to take on more specialised roles (e.g. Nurse and Pharmacology prescriptions, growth in nurse led clinics, growth in community and primary based nursing). This will also need to include completely non-traditional roles such as peers, family as careers, navigator roles, and self-care incentives
Community delivered services	Development of more services in the community where appropriate. This will be enabled by technology advancements and an increasing level of communication between secondary, primary and community services
Followups	Reviewing traditional followup model to shift towards self-initiated, remote, virtual and GP led follow ups
Integration across services	Communication and activity across services that are traditionally siloed in operations to improve patient care (e.g. Diabetes and Renal to care for patients who will likely pass through both services as part of their continuous care)
Outcome based performance	Developing performance measures and evidence based on outcomes to measure performance against a patient's holistic view of care
Health record system	A health record system will be implemented across WDHB or the NZ Health Care System (e.g. EHR) to improve visibility of a patient's medical history to improve intervention and communication efficiency
Primary care and special interests	Working with Primary Care Practitioners to deliver appropriate procedures in a community setting. Allowing GPs with special interests (GPSI's) to perform more specialised treatments in clinics to also retain volumes
Ethnic diversity	Ethnic diversity will increase in WDHB and strategies for engagement and cultural responsive service delivery will be required for better health outcomes across these populations
Telehealth	Telehealth systems to provide monitoring and diagnostic to patients both in urban and rural settings
Social services integration	Working more closely with Social Services (e.g. Housing New Zealand, MSD) to improve cooperation and effective coordination, including sharing expertise and resources to improve holistic health outcomes of patients and families

Clinical technology	Rapid increase in clinical technologies in the next 10 years will improve efficiency, may require more resources and funding
24/7 services	Services that have traditionally operated during weekdays will shift their model to support services over the weekend to optimise efficiency
Service configuration	More services will be delivered locally to improve offerings where feasible. Others could be offered regionally with ADHB and CMDHB where flows and volumes support a centralised offering
Rodney population	The Rodney population will continue to grow and are well suited for home-based services due to their rurality and distance from both secondary hospital sites
Outcome based performance	Developing performance measures and evidence based on outcomes to measure performance against a patient's holistic view of care
ESC integration	Development of ESC to improve flow of patients into the service and future expansion of facilities

Divisional tables

The below divisional tables were created through engaging in workshops with over 35 services in order to understand where they saw the key challenges in the future and where the potential service direction may head. Throughout these workshops the responses were collated and mapped across the timeframes (Immediate, Medium and Longer term) and theme type (Workforce, Services & Facilities, Technology, and Funding & Incentives). These tables highlight the service direction of the services within each Division and have been used to develop the 10 year plan to WDHB to 2025. Further information is within Appendix 4.

Child, Women and Family Division

The Child, Women and Family division provides a range of service to women, children and their families. These services include gynaecology and obstetrics services for women and dental, paediatric and child and family services. SCBU and Birthing suites are provided at both hospital sites, but only Waitakere has a Paediatric Inpatient unit with acutely unwell Paediatric patients presenting at North Shore ED transferred across to Waitakere when inpatient treatment is required. Child services have an established a complimentary community team organised around geographic clusters and manage significant outpatient and community programmes. The Wilson site provides a Child Rehabilitation Service providing comprehensive, family-centred rehabilitation services to children from 0-16 years old, or while still at school and Respite care (out of home support) is provided for children from 0-16 years of age who have high support needs. Three community birthing units are currently offered in conjunction with community providers.

Services are provided primarily to residents of North Shore, Waitakere and Rodney districts, although some services such as the Out of Home Respite and the Regional Dental Service are offered to the broader Auckland Region. The Child Rehabilitation Service is a national service provider. Tertiary children's health services are outsourced to Starship Hospital, part of neighbouring Auckland District Health Board.

Challenges across the immediate, medium and longer term were discussed at a speciality level in workshops and potential responses identified (see Appendix 4). These responses need to be further validated and detailed operational planning, prioritisation, and resourcing established for delivery. The key responses proposed by the service are below and were used as inputs to inform WDHB's transformation journey (see Section 4 below):

Immediate – Medium Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Work further with ADHB on gaining better visibility and fostering better education on birthing options by locality	Immediate Term
		Develop clear referral pathway with the Mental Health service for Obstetrics and Paediatrics	Medium Term
		Work with other regional providers (DHBs and other community partners) to foster better understanding of what services and level of care is available in the region	Immediate Term
		Continue to develop minimum invasive gynaecology work being currently being put forward to Business Case	Immediate Term
	Quality and Effectiveness	Improve the acute paediatric response to children who present to the North Shore Hospital Emergency Department	Immediate - Medium Term
	Patient Communities	Continue ongoing work connecting GPs and Early Pregnancy to provide better care to high risk women	Immediate Term
Enablers	Workforce	Explore options to have more nurse led clinics, foster nursing staff working to the full scope of	Immediate -

Grouping	Dimension	Potential Service Direction	Time Frame
		practice, and work with GPs to take on over appropriate procedures to bring volumes from hospital care to a community setting	Medium Term
		Shortages in ultrasound technicians leading to issues hitting targets. A resolution is to be considered as part of the broader Radiography shortages in the public system being experienced throughout the region	Immediate Term
	Technology	Continue to pilot iPads for community based teams as they have shown improvements in productivity and access. These are envisaged to be rolled out further across the services but require additional investment particularly for the community and ambulatory teams	Immediate Term
	Service & Facilities	Potential for development of a paediatric short stay facility at Waitakere to allow further reduction of length of stay and prevent admissions and at North Shore Hospital to reduce transfers to Waitakere	Immediate - Medium Term
		Investigate the potential for development of community outreach, urban clinics, more community rather than hospital based	Immediate - Medium Term
		Continue to investigate the two more community based birthing centres, one at NSH and one at WTH. This work is being done in conjunction with ADHB	Immediate - Medium Term
		Potential for early pregnancy service (akin to ADHB unit which is nurse led) to meet growing demand in West and offer better support to GPs	Immediate - Medium Term
		Refurbishment of the Wilson Centre	Immediate Term
		Potential for new, more community based model partnering with an NGO for accommodation while the DHB provides appropriate nursing, allied health, and clinical oversight	Immediate Term
	Funding & Incentives		

Medium – Longer Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Investigate for Urogyneacology and Endogyneacology the potential for subspecialisation for these when appropriate by volume	Longer Term
	Quality and Effectiveness	Investigate whether a higher acuity support function or robust transit system will need to be considered, particularly as volumes grow	Medium Term
	Patient Communities	Review a pathway and clear model of care for the high and complex need cohort for Paediatrics	Medium Term
		Improve interconnectivity between services looking after the same patients and families in the	Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		community – particularly through improved communication technologies – to support the move towards multidisciplinary models of care	
Enablers	Workforce		
	Technology	Review further the required investment in hospital, community, and primary care system connectivity through EHR like technology	Medium - Longer Term
	Service & Facilities	Review the feasibility for a HDU facility at WTH	Longer Term
		Future developments in the Rangitara ward and SCBU facilities are planned to have adequate space to allow families to stay	Longer Term
		Continue to review the inpatient growth from WDHB's recent bed model as it predicts that another 16 overnight beds will be required for the Obstetrics service of the next 10 years. The current SCBU levels are considered appropriate, but future growth in demand may require the current even split between the two sites to be reviewed and development directed towards the west	Longer Term
		See Section 3: Potential Services Development and Appendix 3 **Waitakere:** Investigate the movement towards a 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 Paediatric General Surgery, Paediatric Cardiology & Cardiac Surgery, Paediatric Neurology & Neurosurgery, Paediatric ENT / ORL (Otorhinolaryngology), and Paediatric Orthopaedics (with the focus on collaborating with Starship on appropriate care given WDHB's size and catchment) . **The key changes to be investigated are:** o **Patient characteristics and key procedures / treatments** • Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics • Except in emergencies, children under the age of one year are not admitted for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics o **Hours of access** • Medical officer rostered on site 24 hours • Surgery performed by General Surgeons. May be a visiting specialist paediatric surgical service • Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting • Surgery performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours	Medium - Longer Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• Surgery performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service o **Outpatient** • Provides a neurology outpatient consultation service by a neurologist. May be visiting o **Inter-speciality relationships** • The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2)	
	Funding & Incentives		

Surgical and Ambulatory Services Division

The Surgical and Ambulatory Services division provides surgical services to the Waitemata population at both North Shore Hospital and Waitakere Hospital and outpatient clinics at Hibiscus Coast. The service provides surgical specialties – acute and elective general surgery and orthopaedics, elective urology and ORL. Clinical support services include anaesthetics, radiology, anatomical pathology, bowel and breast screening. In addition to this, Radiology, Surgical Pathology and Anaesthetic are conducted. Radiology is conducted at both NSH and WTH with the Department of Anaesthesia and Perioperative Medicine provides anaesthesia services to both North Shore Hospital and Waitakere Hospital, and Pathology is conducted at NSH.

The majority of inpatient procedures are concentrated at North Shore Hospital with Waitakere Hospital catering for short stay surgeries and outpatient clinics. The Intensive Care Unit and High Dependency Unit is located at North Shore Hospital and provides care for patients who require high acuity and / or ventilated support and are not well enough to return to general wards. Waitemata does not provide vascular, plastics and burns services (among other smaller specialties) at either site and presentations are transferred to Auckland or Middlemore Hospital.

Challenges across the immediate, medium and longer term were discussed at a speciality level in workshops and potential responses identified (see Appendix 4). These responses need to be further validated and detailed operational planning, prioritisation, and resourcing established for delivery. The key responses proposed by the service are below and were used as inputs to inform WDHB's transformation journey (see Section 4 below):

Immediate – Medium Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Investigate whether there could be a devolution of more routine procedures to Primary Care settings performed by GPs with a Special Interest (e.g. skin, low risk procedures)	Immediate - Medium Term
	Quality and Effectiveness	Development of surgical blueprint which outlines WDHB surgical and ambulatory plan over the next 10 years, including interdependent specialties such as Radiology, Anaesthetics, ICU, and Surgical Pathology	Immediate - Medium Term
		Review referral guideline and on-going patient management support for GPs including 'real time' advice and support from specialists	Immediate - Medium Term
		Investigate refining business case, model of care, and infrastructure guidelines to include requirements around engaging with Radiology, Surgical Pathology, and Anaesthetics before implementing changes	Immediate Term
		Potential to separate out inpatient and outpatient volumes for Radiology to allow better management of volumes and streamlining of different pathways	Immediate Term
		Identify high volume patient cohorts across all services and prioritise for pathway development – this should include diagnostic pathways, i.e. Radiology (patient disease approach)	Immediate - Medium Term
		Investigate how to cater to the increased demand for the screening programmes (e.g. Bowel Screening and Non urgent colonoscopy, Breast Screening)	Immediate - Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		Cancer Services in the future will likely rise, requiring development and focus on: • Ambulatory Precinct • Delivery of oncology services (See below point on RDM for oncology considerations) • Faster Cancer Treatment Times • Quality • Surgical Pathology and radiology demand growth, where cancer related testing and diagnostics already forms a substantial portion of volumes • Patient experience	Immediate - Medium Term
		Expand ongoing efforts to improve efficiency of delivery, including: • Reducing cancellations • Improving turnaround between cases • Wait time to OR for acutes • Full day lists • Separation of day surgery and inpatient stay lists • Services generally sees acutes that is capable of being planned and more predictable than currently managed • Improvement of accuracy and quality of available data and productivity measures, such as OR and Radiology utilisation figures, nursing and allied health acuity predictions, etc.	Immediate Term
	Patient Communities	Investigate how to improve health literacy for Maori and Pacific Peoples in culturally appropriate formats (e.g. DNA rates continue to be an issue). Particular focus on screening programmes and clinic attendance	Immediate Term
		Identify key patient pathways and leverage ongoing Bohmer work to develop improved pathways for the key patient cohorts, and expand MDT models to key patient cohorts	Immediate - Medium Term
Enablers	Workforce	Investigate the scope and roles of new specialists staff who can perform work previously completed by medical profession (e.g. nurse practitioners, nurse led clinics, and care coordinators)	Immediate Term
	Technology	Growing number of follow up appointments presents opportunity for telehealth, virtual clinics, and GP follow ups, particularly to help manage growth in more remote populations such as Rodney	Immediate Term
	Service & Facilities	Currently a facilities review of 'fit for purpose' is underway and will seek to address identified issues with current facilities and equipment	Immediate Term
		Linked with ongoing ADU work, potential for surgical dedicated ADU to separate medical and surgical patients to better manage flow and provide timely access, treatment, and help avoid inpatient admissions	Immediate Term
		Investigate how to improving the utilisation of the ESC. Suggestions to consider include: • ORL & Plastics to be added • Regional service provider for Orthopaedic (i.e. Centre of Excellence)	Immediate Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• Endoscopy • Management of lists and scheduling	
		Review and investigate how to better manage lists and scheduling to improve ESC utilisation	Immediate Term
		Further modelling required on population and demand for key diagnostic equipment, including when a third MRI and 4th CT scanner will be needed. With improvements in accuracy of data and forecasts, will be important to link with highest growth area (i.e. CT scanner would logically be on the ambulatory precinct site)	Immediate – Medium Term
	Funding & Incentives	Investigate how funding occurs internally for the surgical services and align better to outcomes and incentives (e.g. Radiology currently competes with other surgical asset requirements, creating investment choices between unrelated but equally important assets)	Immediate - Medium Term

Medium – Longer Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Investigate opportunity to leverage private, PHO, and community based diagnostic equipment to meet future demand in community services	Medium - Longer Term
	Quality and Effectiveness	Investigate how to provide more 'rigour' in certain services (e.g. more efficient pulmonary exercise testing for pre-anaesthetic clinics; pain clinic expanded to include multi-disciplinary teams)	Medium Term
		Investigate regional services or how to enhance collaboration. Examples provided by the services included: • Certain orthopaedic procedures done in one location within the Auckland region • Regional dietitian service for obese patients who need to be 'prepared' before being accepted for surgery • Review growth and service provision closer to home for specialties with large volumes – for example plastics, vascular	Medium Term
		Investigate the development of advanced IR service to support growing surgical and medical services	Medium Term
	Patient Communities	Review and investigate the need to focus surgical services around key patient cohorts (e.g. neck of femur performed by orthopaedic surgeon as a referral by geriatrician who looks after rehab and other illnesses of elderly)	
Enablers	Workforce	Review sizing of FTE and SMO time, particularly for Ortho-Geriatric care, ICO/SMO cover, ad key inter-dependant services such as Pathology, Radiology, and Anaesthetics	Medium Term
		Review and investigate a variety of future workforce considerations. Some are below:	Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• The current workforce is aging and there is a difficulty in resourcing night shifts. There is a need to create more flexible pathways for peoples' careers • Investigate the skill mix of senior staff, especially for Anaesthetic / ICU • Improve the ability to efficiently and sustainability train junior RMOs • At present a technician workforce not readily available (e.g. anaesthetic techs) • Improve training so staff are adequately prepared for the future (e.g. more simulation type courses)	
		Research and investigate the rise of other specialist staff that can perform work previously completed by medical profession (e.g. nurse led clinics, care coordinators etc.)	Medium - Longer Term
	Technology	Investigate technology that links primary to secondary care providers to enable greater communication	Longer Term
		Pathology is a manual service requiring human assessment and this is unlikely to change from the services perspective going forward, however some efficiencies can be gained from investment in technologies such as digital slide scanners, more integrated EHR, voice recognition and automatic microtome machines	Longer Term
		Investigate remote monitoring and what would be required to set up and facilitate dedicated time to see these patients via new technologies	Longer Term
		Consider timing and need for investment in CT PET capability in the northern region, which for Waitemata is linked heavily with decisions around local provision of oncological services	Medium – Longer Term
	Service & Facilities	Review resourcing compared to volume and complexity of casemix for Surgical pathology and radiology, where both services identified growing demand and heightened complexity in demand as key issues currently facing services and only likely to increase moving towards 2025	Medium - Longer Term
		Investigate the ramifications of extending services beyond NSH to other facilities (e.g. Pain services to WTH & ESC)	Medium Term
		Current space constraints in Radiology and Surgical pathology limit the ability to keep up with best practice technology and practice. WDHB should include these services in refurbishment and future facilities development to ensure adequate room and future proofing exists within facilities	Medium - Longer Term
		Review the option of exploring delivery of elective surgical services at WTH. This could involve WTH being a dedicated site for specific procedures (e.g. colorectal)	Medium - Longer Term
		Investigate 'specialised' WDHB facilities and services may be required as volumes increase, such as: • Ortho-geriatrics may need own post-operative care area • Area in wards to look after post HDU patients • Procedure rooms in ED for simple procedures • Specific procedure lists (e.g. carpel tunnel lists; shoulders lists, hips lists, knees lists)	Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		See Section 3: Potential Services Development and Appendix 3 **North Shore:** Investigate development of surgical services at North Shore to a 'high volume and medium patient complexity level', which translates under the RDM to level 4 ENT / ORL, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Plastic Surgery (incl. Burns), Urology, Vascular Surgery. The key changes associated with this are: o **Patient characteristics and key procedures / treatments** • Minor and intermediate procedures on low or medium risk patients for plastics • Up to complex surgical procedures on medium risk patients for ENT / ORL, Ophthalmology, Urology, and Vascular • Complex diagnostic and treatment procedures on all risk patients including an acute aortic aneurism service o **Hours of access** • Normal working hours for Specialist plastic surgeons available normal working hours • On call and after hours provision for ENT / ORL, Ophthalmology, Urology, Plastics, and Vascular • Consideration given to develop a 24/7 interventional radiology service with adequate SMO cover • Emergency and specialist oral health care for inpatients o **Inter-speciality relationships** • Facilities for general anaesthesia for day surgery or longer admission • All other support services are met in the RDM, but it was noted in workshops that all major support services are near capacity. Growth in services would likely push these past the tipping point and require further resource and facilities **Waitakere:** Development of surgical services to 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 General Surgery, Cardiothoracic, ENT / ORL, Gynaecology, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Orthopaedics, Plastic Surgery (incl. Burns), Urology, Vascular Surgery: o **Patient characteristics and key procedures / treatments** • Up to intermediate ENT/ORL surgical procedures on low or medium risk patients. Excluding neuro-otic or intracranial surgery • Up to intermediate surgery on medium risk patients and some complex surgery on low risk patients for General Surgery • Intermediate procedures on low or medium risk patients and complex procedures on low risk patients for Gynaecology, Ophthalmology, and Urology o **Hours of access** • General surgeon rostered on site normal working hours and rostered on-call after hours	Medium - Longer Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• Medical Officer or RMO rostered on site 24 hours • ENT/ORL surgeon available normal working hours. May be part of a regional service • Specialist Gynaecologists rostered in normal working hours with rostered on-call for after hours • Specialist care provided by dentists with specialist experience or by dental specialists during normal working hours • Urologist available normal working hours. May be part of a regional service o **Outpatient** • Outpatient consultations by plastic surgeon during normal working hours. May be visiting o **Inter-speciality relationships** • The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2), CCU to level 3 (from 2) **Review and investigate the plan to develop Waitakere Hospital to full level 4 hospital**	
	Funding & Incentives		

Medicine and Health of Older People Division

The Medicine and Health of Older People Services provides medical services to the WDHB population and the full range of care to older people (including Mental Health services). North Shore Hospital is the major site for service delivery with 24/7 acute services supported by an Emergency Department and Assessment & Diagnostic Unit. Waitakere Hospital is the secondary site for medical services featuring General Medicine and Cardiology beds, an ADU but lacking acuity support such that severely unwell patients are routinely transferred to North Shore under pre-specified clinical criteria. Acute inpatients for Medicine at WDHB are operated under a generalist model, with SMOs effectively splitting their FTE between a subspecialty and the broader General Medicine roster. Waitemata does not provide neurology, or oncology services and these are provided by ADHB. Health of Older People services has a range of Geriatric care related services across both main hospital sites, along with, community based teams (North, West & Rodney), as well as both acute and community Mental Health Services for the Older Adult.

Challenges across the immediate, medium and longer term were discussed at a speciality level in workshops and potential responses identified (see Appendix 4). These responses need to be further validated and detailed operational planning, prioritisation, and resourcing established for delivery. The key responses proposed by the service are below and were used as inputs to inform WDHB's transformation journey (see Section 4 below):

Immediate – Medium Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Development of an early discharge and rehabilitation service – initially focused on stroke patients	Immediate Term
		Develop a proposed model of care for a Transitional Unit based in the community to support lower acuity rehabilitation patients	Immediate Term
		Redesign the current AT&R wards on the North Shore site which are not fit for purpose (Medical Tower)	Immediate Term
		Investigate whether the right environment is available to support new pathway (options rather than inpatient beds, i.e. day stay type setting – chairs rather than beds/ longer term community options)	Immediate - Medium Term
		Link the stroke patient pathway to the early discharge and rehabilitation service proposal (role of Wainamu – West in the management of stroke patients)	Immediate - Medium Term
		A multi-disciplinary, front door (ED or ADU based) rapid response team to efficiently diagnose and treat incoming secondary patients as outlined in the Medical Blueprint. This should also be extended to include other key specialties and clinical support services which has not yet occurred (i.e. radiology, orthopaedics).	Immediate - Medium Term
		Investigate whether the devolution of more routine procedures to Primary Care settings performed by GPSIs is attainable at present – for example 20% of all Cardiology volumes were classed as "without catastrophic or severe" presentation within the inpatient database	Immediate - Medium Term
		Identify the opportunities for remote triaging and consults as technology improves. This has large implications from post-care after discharge from ED and ADU (e.g. wound care reminders) which could	Immediate Term

Grouping	Dimension	Potential Service Direction	Time Frame
		reduce readmission or reliance on other services	
		Coordinate secondary care for older groups of patients (i.e. multiple outpatient appointments) – risk stratify patients for higher input	Immediate - Medium Term
		Investigate the use of telehealth / support apps for chronic patients	Immediate - Medium Term
		Develop emergency planning for a supply shortage or large infection outbreak (e.g. Ebola) which is becoming more common as resistant organisms evolve	Medium Term
	Quality and Effectiveness	Agree a standard approach/methodology for pathway development, implementation and evaluation	Immediate - Medium Term
		Continue to enhance the screening and intervention for cardiovascular risk in people engaged with mental health services	Immediate - Medium Term
		Identify high volume patient cohorts across all services and prioritise for pathway development – this should include diagnostic pathways, i.e. Radiology (patient disease approach)	Immediate - Medium Term
		Explore how best to support the patient in the acute general medical wards – nursing, allied health and medical team.	Immediate - Medium Term
		Continue to develop the relationship between the GNS and ARC facilities through the RACIP program to support complex patients in ARRC and to continue to prevent avoidable admissions to hospital	Immediate - Medium Term
		Provide timely and high intensity home based support packages to a clearly identified patient group on discharge to enable them to regain functionality post an acute admission (up to 6 weeks)	Immediate - Medium Term
		Improve the process for assessing acutely presenting patients, with a one-stop shop model and closer alignment to primary services likely to offer substantial gains (see ADU service response above)	Immediate Term
	Patient Communities	Continue to contribute to regional stroke forum – focus on community education wider brief than provider arm	Immediate - Medium Term
		Frail Elderly (Richard Bohmer) – Bring the MDT team with Geriatrician input to the 'front door' (ED/ADU) to develop a care plan for the agreed frail elderly cohort. This would ideally include family and may require NASC input.	Immediate - Medium Term
Enablers	Workforce	Develop the appropriate workforce to provide care in line with the pathways, i.e. CNS, NP initiated	Immediate - Medium Term
		Development of the workforce to manage stroke patients – Medical, Nursing and AH model	Immediate - Medium Term
		Investigate the navigator role for those patients with multiple and complete long term conditions	Immediate -

Grouping	Dimension	Potential Service Direction	Time Frame
			Medium Term
		Additional resourcing has been proposed for Waitakere General Medicine	Immediate - Medium Term
		Develop a new roster that better matches numbers to acuity and volumes after hours	Immediate - Medium Term
		Undertake the Medical Blueprint recommendation proposal having SMOs in-house until 8pm	Immediate - Medium Term
		Increase the overnight staffing at both hospitals by House Officers and Registrars	Immediate - Medium Term
		Undertake a resource mix review for the two EDs	Immediate - Medium Term
		Review resourcing for high volume subspecialties such as Gastroenterology	Immediate - Medium Term
		Determine whether there is sufficient SMO time and FTE must be available to meet the educational requirements current accreditation status of the DHB. The suggested Medical Blueprint FTE changes would work to improve ratios to achieve this, but it should be considered across all Medical services as a training facility	Immediate Term
		Continue with the ongoing business case planning across the organisation to provide 24/7 in key services should also consider supporting services such as Allied Health	Immediate Term
	Technology	Ensure there are electronic systems to capture and report against the pathways (variance reporting/outcome reporting)	Immediate - Medium Term
		Investigate whether an integrated shared health record for chronic patients would enable all the care providers and the patient to have a single repository for their clinical information	Immediate - Medium Term
		Investigate whether remote monitoring and telehealth systems could reduce the need for a physical appointment, improving capacity on site and more accurately direct patients to specialty care when required. Beyond enabling technology, important aspects to consider to make this work are appropriate assignment and tracking of SMO time, as well as sufficient resourcing or competency in community / primary care settings	Immediate Term
	Service & Facilities	Increasing medical staffing for General Medicine will enable more patients to remain at WTH in the future. However consideration needs to be given to an HDU for both Medicine and Women's Health (no surgical inpatients currently). ***See Section 3: Potential Services Development and Appendix 3***	Immediate - Medium Term
		Rehabilitation and Mental Health of Older Adult beds / wards have not changed to match the increased	Immediate –

Grouping	Dimension	Potential Service Direction	Time Frame
		growth in elderly care; alongside model of care changes consider appropriate expansion of beds and facilities	Medium Term
		Review whether the ADU component of the ADCU at WTH will need to expand over time (as noted above for North Shore) and identify the cost of doing so	Immediate - Medium Term
		Review whether extending support services (e.g. Radiology, Anaesthetics) would be required to safely increase the clinical acuity of the inpatients at Waitakere Hospital	Immediate - Medium Term
		The facilities review of 'fit for purpose' currently underway to establish refurbishment gaps	Immediate - Medium Term
	Funding & Incentives		

Medium – Longer Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Determine whether WDHB General Medicine Service will use a "home-based" ward system featuring an interdisciplinary team working in parallel with allied health staff, nursing, linked to community services as outlined in the Medical Blueprint	Medium Term
		Identify whether Medicine will develop further sub speciality beds for complex respiratory and gastroenterology patients over time on the North Shore site	Medium Term
		Consideration needs to be given to appropriate model embedded medical and surgical multidisciplinary teams, as well as at the Front Door in the ED and ADU	Medium Term
		Investigate what the movement to primary care will involve education and common guidelines for infection control and prevention	Medium - Longer Term
		Implement the ADU medical model	Medium Term
		Identify what services could be provided in community and/or co-located with GP's/primary care	Longer Term
	Quality and Effectiveness	Review the threshold for access and consider it alongside demographic change when planning for facilities & workforce requirements	Medium - Longer Term
		Reconfigure the ADU to manage 'day stay' type patients, provide timely acute assessment, appropriate staff to support this activity timely access to support services and an appropriate environment	Medium Term
	Patient Communities	Determine whether a strong sub specialty consult focus will continue to be developed at Waitakere Hospital to support the general medicine patients (this includes visiting services such as oncology)	Medium Term
		Consideration needs to be given to further enhancing Maori & Pacific support services for geriatric care. No dedicated team currently exists	Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
Enablers	Workforce	Investment and development of other specialists staff who can perform work previously completed by medical profession (e.g. nurse practitioner, nurse led clinics, care coordinators)	Medium Term
		Investigate how a workforce change could allow for the proactive management of infections	Medium Term
	Technology	Identify what technology will allow for patient focused booking and coordination of multiple appointments	Longer Term
		Identify how to increase the use of telehealth	Longer Term
		E-referrals and electronic triage has so far made an impact and are planned to roll out further, but further investment and intensification required (e.g. formal Electronic Health Record system)	Longer Term
	Service & Facilities	Inpatient bed numbers for Medicine are forecasted to grow by 158 in the next 10 years. Investigate whether an additional Medical Tower could cater for this predicted growth.	Longer Term
		Services suggested dedicated beds for high volume medical services (e.g. gastroenterology), and associated need for sufficient specialised nurses and RMO resources	Longer Term
		The Senior Management Team and broader executive have identified an ambulatory centre as an important enabler for better segmentation of care and model of care improvements for ambulatory cases and outpatient clinics. Investigation is required	Longer Term
		Investigate how future facilities should be designed to enable infection control	Medium - Longer Term
		Identify what future models of care should be developed that consider the role of gastroenterology and endoscopy particularly as diagnostic versus therapeutic, and where it best fits in the patient care continuum	Medium Term
		See Section 3: Potential Services Development and Appendix 3 **North Shore:** Investigate movement towards a RDM 'level 5' General Medicine service due to extensive predicted growth in General Medicine services and in Health of Older adults in particular. This requires investigation on the following key step changes • Development of key Medical specialties rosters, clinical scope, and access, potentially including Palliative Care, Renal , Respiratory, Cardiology and Cardiothoracic • Development of Specialist Rehabilitation towards level 4, including Designated inpatient rehabilitation unit, Specialist Medical Officer with training in rehabilitation medicine responsible for patient care available normal business hours, and dedicated inter-disciplinary teams with specific expertise in dedicated rehabilitation programs. May be orthopaedic, neurological etc. • Access to a level 5 medical and radiation oncology service for Cardiothoracic due to the requirements needed to support a level 5 General Medicine service **Waitakere:** Investigate movement towards a RDM 'level 3' for WTH medicine **(see Potential Services development in Section 3)**, including:	Medium - Longer Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• Immunology • Emergency Medicine • Medical Oncology • Clinical Haematology	
	Funding & Incentives		

Mental Health Division

The Mental Health and Addictions division provides a range of services for children and adults with moderate to severe mental illness or psychological distress and with addictions problems. Services are provided by a variety of trained professionals including psychiatrists, nurses, psychologists, occupational therapists, social workers and addictions clinicians. Key partnerships and relationships are held with the NGO sector, which are a critical part in how the Mental Health and Addictions Division works to provide the appropriate continuum of care for with more serious disorders. A large portion of Mental Health and Addictions services work is performed out in the community, with a Multi-Disciplinary Team model configured around the three major geographic clusters within Waitemata District, as well as services elsewhere in the region for those services for which this DHB is the regional or Auckland metropolitan area provider.

Services work alongside the person and their family/Whānau to provide treatments that will help people recover from mental illness and/or addiction problems. These may be psychological, pharmacological and/or other interventions.

Services are provided primarily to residents of North Shore, Waitakere and Rodney districts. Two of the services (Forensics and Community Alcohol and Drugs) provide services for the entire Auckland region.

Challenges across the immediate, medium and longer term were discussed at a speciality level in workshops and potential responses identified (see Appendix 4). These responses need to be further validated and detailed operational planning, prioritisation, and resourcing established for delivery. The key responses proposed by the service are below and were used as inputs to inform WDHB's transformation journey (see Section 4 below):

Immediate – Medium Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Development of models to assist in treating mental health problems in a primary setting	Immediate - Medium Term
		Further develop stepped care models and referral pathways to ensure access to an appropriate level of care for the full range of severity of mental health problems	Immediate - Medium Term
		Expansion and investment in 'Choice' model for Child & Youth service	Immediate - Medium Term
		Investigate a Hub and Node approach to expand on Mason Clinic (as a hub), with increasing community presence in key geographic areas rather than expansion of inpatient facilities	Immediate - Medium Term
		Consideration should be given to further investment in self-help tools online or in mobile apps, particularly for Child & Youth Services and Community Alcohol and Drug Services	Immediate - Medium Term
	Quality and Effectiveness	Identify key services where MH overlap with medical and surgical services in a hospital setting	Immediate Term
		Discuss options for integration of MH support with identified services (e.g. increase in co-location of consult liaisons at hospital sites and wards)	Immediate Term

Grouping	Dimension	Potential Service Direction	Time Frame
	Patient Communities	Conduct discussions with CWF to determine how Child and Youth Mental Health services could work better together for patients accessing both services, possibly in conjunction with NGO / primary youth health services. This could include colocation of services on hospital campus or appropriate facilities	Immediate Term
		Continue to strengthen links and communication with work and Income and Housing for Adult Mental Health, Education for Child & Youth, Justice and Police for Forensics, and Justice and Corrections for Addictions Services	Immediate Term
Enablers	Workforce	Understand the potential to increase workforce in key areas where patient outcomes and access are most adversely affected	Immediate Term
	Technology	Develop self-help tools and improve utilisation of online forums so that the community is supported to self-care	Immediate - Medium Term
	Service & Facilities	Review of a 'hub and node' service configuration is underway for Forensics to plan for increased capacity and facilities location across the region	Immediate - Medium Term
		Investigate the upgrade of Mason Clinic security features should be planned to ensure the safety of patients and reduce disruption to service provision – this could be timed with the introduction of additional capacity as part of the 'hub and spoke' model	Immediate - Medium Term
		The Mason Clinic also caters for 'High and Complex Needs' patients which sit outside of the core forensic offerings. This contributes to the high occupancy of beds and may change in the next 10 years but will require a review of policy and revenue	Immediate - Medium Term
		Develop timeline for the projected expansion of acute bed capacity to maintain safe occupancy of available beds, in accord with accepted benchmarks	Immediate - Medium Term
		Agree regional solution for the development of response to SACAT Act requirements (residential care for compulsory assessment and treatment of substance abuse)	Immediate - Medium Term
	Funding & Incentives		

Medium – Longer Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Communication and planning between Child & Youth and Adult MHS to bring in the transition should the services be reconfigured to develop youth specialty services. This may have the impact of changing the distribution of volumes between services. Changes in age boundaries between adult and older adult services will increase the need for collaborative models of care between these services, as well as having potential to substantially increase volume of adult service activity	Medium Term
	Quality and Effectiveness	There is a strong history of close work with the NGO sector and it is expected this will develop further. This has particular relevance to ethnic populations (Maori, Pacific, and Asian) in the form of family/Whānau and peer care models. Co-design of patient pathways and step-down referrals with NGOs. Further strengthening of relationships with NGOs has potential to enhance community care for individuals with complex needs.	Immediate to Medium Term
		Further improvement possible to care for the medical needs of people with psychiatric illness, who tend to have shorter life expectancies due largely to high comorbidities with cancer, respiratory disease, and cardiovascular disease. This will require concerted effort across Funder, Primary Care and other medical specialties.	Medium Term
	Patient Communities	Begin discussions with NGOs to develop peer care models that cater for cultural requirements of ethnic populations	Medium Term
Enablers	Workforce	Develop succession planning across services and incentives to attract and retain a graduate workforce	Medium Term
		Investigate how to attract an ethnic workforce and educating staff on cultural treatment requirements for ethnic populations	Medium Term
		Conduct planning for the future workforce based on a shift in the setting of care, technology requirements of the workforce and shifting mix of roles	Medium Term
		Develop a sophisticated and comprehensive workforce plan	Medium Term
	Technology	Identify the role of e-therapies in providing mental health services (e.g. monitoring check-ins, targeting adults, forensic check ins from prison)	Medium Term
		Investigate EEG service within Waitemata	Medium Term
		Discuss intervention methods with key hospital services that receive patients also presenting mental health symptoms	Medium Term
	Service & Facilities	Consideration of increased beds for Adult Mental Health to catch up to established benchmarks and reduce occupancy to safe levels	Medium Term
		Investigate the development for Mental Health services similar to other Divisions RDM analysis	Medium - Longer

Grouping	Dimension	Potential Service Direction	Time Frame
		(Note: could not be completed in this Phase of the HSP as Mental Health is missing from the NZ RDM model)	Term
		Forensic services for Youth should be planned with consideration given to the regional and national provision of services	Medium Term
		The Mason clinic current provides services for intellectually disabled offenders. Step down beds development needs to be explored as part of the pathway back to community care. There is currently a shortfall of approximately 8 step down beds for forensic ID.	Medium Term
		The Ministry of Health determined that the first set of YF beds would be developed in the CCDHB service in Wellington, but expansion in numbers as a further area of development is likely to take place in the Northern region	Medium Term
		Further development of 'interventional psychiatry' (e.g. ECT, TMS) will require increased day procedure space in day stay theatre or ambulatory care setting	Medium Term
	Funding & Incentives	Investigate how to prepare services for a funding shift and consider how different incentives and rewards would impact on Models of Care and provision of services	Medium Term

Hospital Operations Division

The Hospital Operations division provides a range of services for the divisions, patients and their families. This division includes the following services; Pharmacy, Laboratory services, Nutrition & Food, Traffic and Fleet, Security, Clinical Engineering and Clinical Support Services *(Cleaning and orderlies)*.

Services are provided by a variety of staff ranging from trained professionals to casual staff and work under a range of different models being; full time, part time and as required. Key relationships with the rest of the organisation are crucial for the services within the Hospital Operations division due to their interoperability. The services performed by this division operate across the entire WDHB catchment with a variety of services performed within hospital groups and in the community, through multi-disciplinary teams.

The greatest opportunity for improvement for the Hospital Operations division moving forward will be to become an active part of any forward thinking discussions with the other divisions. Early engagement with allow for the proper planning of support services, especially when the development of infrastructure and models of care is planned.

Challenges across the immediate, medium and longer term were discussed at a speciality level in workshops and potential responses identified (see Appendix 4). These responses need to be further validated and detailed operational planning, prioritisation, and resourcing established for delivery. The key responses proposed by the service are below and were used as inputs to inform WDHB's transformation journey (see Section 4 below):

Immediate – Medium Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Investigate refining business case, model of care, and infrastructure guidelines to include requirements around engaging with key support services Include support service representation on multi-disciplinary planning committees	Immediate - Medium Term
		Set up milestones for which to increase the size of clinical support services so that there are not undue delays and decreases in quality	Immediate - Medium Term
	Quality and Effectiveness	Develop waste and sustainability: • Improve current procurement contracts so that the product supplier must pick the waste generated (e.g. pick up empty cleaning bottles) • Investigate what can be done with other waste so that it can be recycled or sold (e.g. bailing cardboard) • Review how bins are organised and set up around the hospitals and community sites so that recycling can be done in an easy and proactive way	Immediate Term
	Patient Communities		
Enablers	Workforce	Develop a plan to attract a younger workforce which may include provisions for flexible working hours	Immediate - Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		Address the large number of current vacancies (I.e. Linen have approximately 70 vacancies)	Immediate Term
	Technology	There are a wide range of technology improvements being proposed by Laboratory and Pharmacy services, including: • Pharmacy currently scoping using of robotics to gain significant efficiencies in prescribing and dispensary, which is currently a very manual data entry and distribution process. eLabs piloted and showing huge improvements • RFID enabled linkages essential going forward; currently have patient barcoding but unable to link it through to prescribing and distribution, while opportunities such as RFI in fridges to count blood and temperature	Immediate - Medium Term
	Service & Facilities	Create an approved list of assets that people can purchase (i.e. industrial washing machines versus cheaper residential washing machines) and set up processes so that divisions can only purchase from the approved list	Immediate Term
		Improve standardisation: • Create a list of approved room setups so that support services such as cleaning can be done in a more efficient way • Create standardised processes for storing assets and set up the needed processes to ensure people adhere to the processes made	Immediate Term
	Funding & Incentives		

Medium – Longer Term:

Grouping	Dimension	Potential Service Direction	Time Frame
Models of care	Settings of care	Increase automation of services: • Investigate and develop an automated system for food and linen delivery with staff assisting where specialist skills are required and to assist if there is a fault with the technology • Develop hand-held PID systems for patients so that they can order their own food or request other services without having to request it from nurses or wait until allocated times • Develop an automated system that checks licence plate numbers as they enter the hospital grounds to assist in understanding patient load and where staff are	Longer Term
	Quality and Effectiveness	24/7 provisions of services for food: • Identify the role of 24/7 food provision and how it can be used in the future • Determine the feasibility of moving to a 24/7 and more flexible model of delivering food services	Medium Term
	Patient Communities	Move to a personalised approach for patient nutrition: • Collect more information on the patient as they enter the hospital (e.g. weight of patient) • Create specific nutritional choices for clients based on information provided through utilising dietitians and technology	Longer Term
Enablers	Workforce	Develop succession planning across clinical support services for the aging workforce	Medium Term
		Plan what the future capabilities would be for the workforce based on future model of care, technology and role changes	Medium Term
	Technology	Simplify IT services and develop them further so that they can be used off site	Medium Term
		Improve the way clinical support communications both internally and externally: • Identify the role of telemed in both providing services and communicating with others both internally and externally as with the growing demand in the community it will not be possible to visit everyone face to face • Investigate the needed step change required to transition to a telemed model (i.e. what investment is required and what would the impact be)	Medium Term
	Service & Facilities	Develop fleet planning: • Develop specialised vehicles where appropriate to enable more efficient delivery of services off-site (i.e. larger patient support vehicles) • Improve the utilisation of fleet vehicles through creating a system that tracks vehicles and when they are not being used so that other staff can use them	Medium Term
		Plan to work closer to other services when infrastructure is being developed:	Medium Term

Grouping	Dimension	Potential Service Direction	Time Frame
		• Create a timeline of future infrastructure builds and proactively reach out to the key stakeholders to ensure that clinical support services can provide advice and feedback • Determine what potential model of care changes may occur within clinical support and ensure that future infrastructure builds have the potential to be adapted in the future to allow for them	
		Investigate development for Commercial services (i.e. Fleet, Linen, and Food). ***Note: RDM analysis could not be completed in this Phase of the HSP as missing from the NZ RDM model***	Medium - Longer Term
	Funding & Incentives		

Section 4: Identification of timeframes for action

This Section pulls together the above described principles and priorities, health needs, WDHB challenges, mega trends, role delineation results, and service identified challenges and responses into an overarching plan for the next ten years.

Growth path towards Waitemata 2025

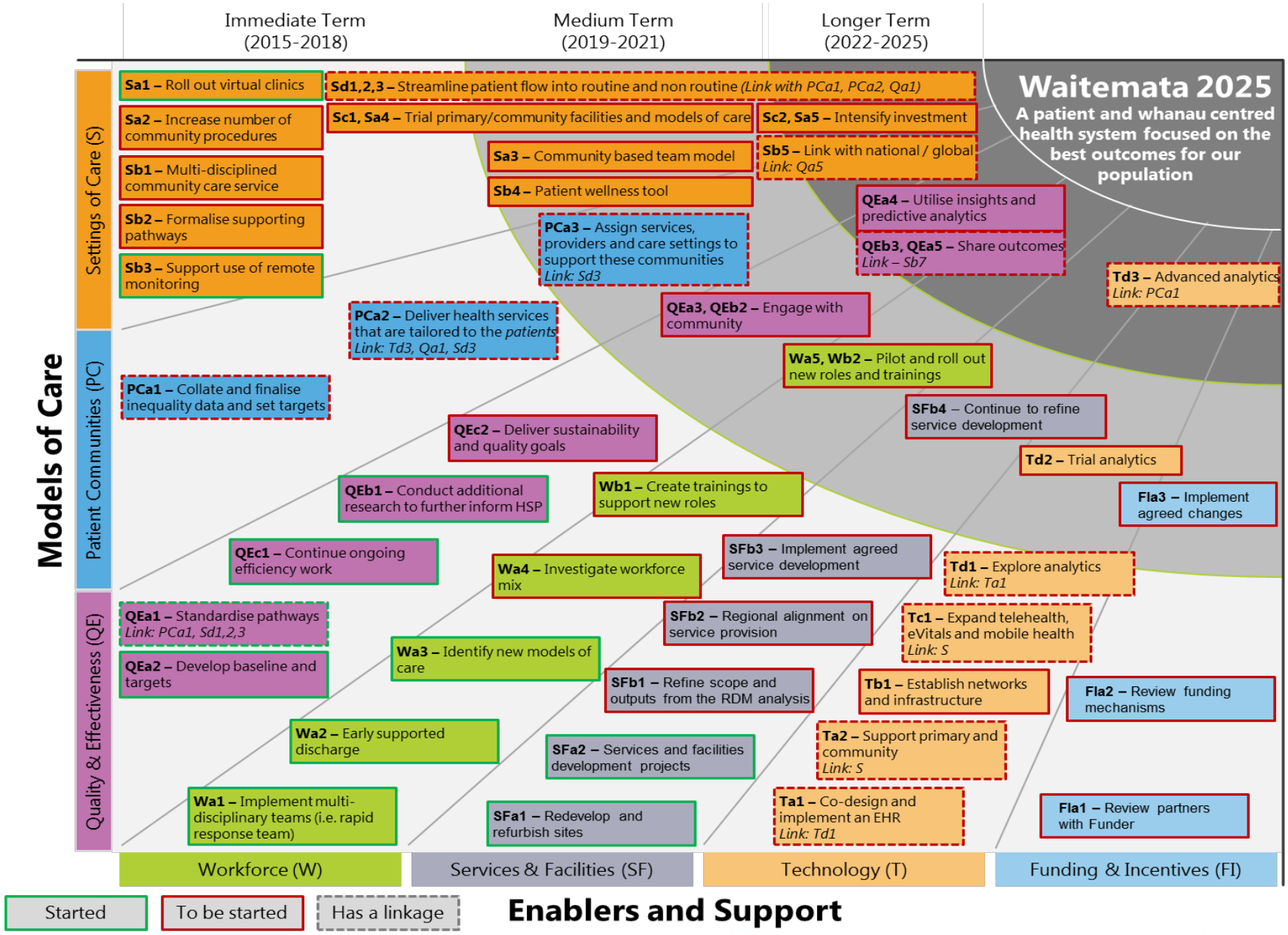
As highlighted in Section 3, there is a significant step change from current state to Waitemata 2025, and therefore a growth path is required towards this end state. Below this growth path is described, with the immediate term amplifying the current focus towards increased effectiveness and best practice outcomes, and then making the necessary shifts and development activities beyond this to make the 'leap' to the end state. While this end state is well defined and the key features are clear, the timing of the key drivers and shifts remains highly uncertain. For simplicity, therefore, the HSP identifies three major time envelopes, with decreasing levers of measurability and clarity as WDHB moves towards the end state:

- The **'immediate term'** is classified as 0-3 years following the commencement of the HSP. This features a focus on effectiveness and efficiency, particularly around quality outcomes, major outpatient volumes, and hospital efficiency. This timeframe has a relatively high degree of certainty and measurable impacts compared to the medium and longer term time horizons
- The **'medium term'** is classed as 3-5 years following the commencement of the HSP. Actions in this period will address matters which are of moderate urgency, and relatively higher importance. Actions that are written into this timeframe are also considered to be achievable – from planning through to execution within this period, however with less certainty and only some ability to measure outcomes from this time vantage point
- The **'longer term'** is classed as 5-10 years following the commencement of the HSP. Actions addressed in this period will be those requiring longer lead-times for planning as well as those which address challenges that are anticipated but are yet to materialise. This timeframe will have the least certainty and no little material measurability, but is essential to establish the desired end destination for WDHB services

The key changes identified in Section 3 have been grouped across seven major variables to provide a comprehensive framework and have been mapped over time to indicate development towards Waitemata 2025. These variables are:

- **Models of Care:** Required changes in practice and patient care to move towards a system that is highly efficient, patient centric, multidisciplinary, and features appropriate segmentation of care. For clarity this has been further broken down into:
    - **Settings of Care:** Changes and trends focused on breaking down the clinician and location centric care models currently in place to provide the best care for everyone in the most appropriate setting
    - **Patient Communities:** Moving towards a patient and Whānau centric model that clearly identifies its patient cohorts and centres care around their needs and requirements across the full continuum of care
    - **Quality & Effectiveness:** Continuing to improve evidence based care and efficiency of services, while also defining clear outcomes based measures to track progress
- **Enablers**
    - **Workforce:** Having the right level of staff and skill and role mix to support new models of care and ensure the highest quality of care delivery

- **Services & Facilities:** Developing services to provide the appropriate access and support given WDHB's size and patient types, and developing facilities that are right sized and fit for purpose
- **Technology:** Investing in technology that promotes interconnectivity and availability of information and insights, and solutions that enable effective delivery and support new models of care in a number of different care settings
- **Funding & Incentives:** Developing funding and budgetary incentives that align to outcomes and promote patient wellness


Immediate Term (2015-2018)
Medium Term (2019-2021)
Longer Term (2022-2025)
Waitemata 2025
A patient and whanau centred health system focused on the best outcomes for our population
Models of Care
Settings of Care (S)
Patient Communities (PC)
Quality & Effectiveness (QE)
Sa1 – Roll out virtual clinics
Sa2 – Increase number of community procedures
Sb1 – Multi-disciplined community care service
Sb2 – Formalise supporting pathways
Sb3 – Support use of remote monitoring
Sd1,2,3 – Streamline patient flow into routine and non routine (Link with PCa1, PCa2, Qa1)
Sc1, Sa4 – Trial primary/community facilities and models of care
Sc2, Sa5 – Intensify investment
Sa3 – Community based team model
Sb5 – Link with national / global Link: Qa5
Sb4 – Patient wellness tool
PCa3 – Assign services, providers and care settings to support these communities Link: Sd3
QEa4 – Utilise insights and predictive analytics
QEb3, QEa5 – Share outcomes Link – Sb7
Td3 – Advanced analytics Link: PCa1
PCa2 – Deliver health services that are tailored to the patients Link: Td3, Qa1, Sd3
QEa3, QEb2 – Engage with community
Wa5, Wb2 – Pilot and roll out new roles and trainings
PCa1 – Collate and finalise inequality data and set targets
SFb4 – Continue to refine service development
QEc2 – Deliver sustainability and quality goals
Td2 – Trial analytics
QEb1 – Conduct additional research to further inform HSP
Wb1 – Create trainings to support new roles
Fla3 – Implement agreed changes
QEc1 – Continue ongoing efficiency work
Wa4 – Investigate workforce mix
SFb3 – Implement agreed service development
Td1 – Explore analytics Link: Ta1
QEa1 – Standardise pathways Link: PCa1, Sd1,2,3
SFb2 – Regional alignment on service provision
Tc1 – Expand telehealth, eVitals and mobile health Link: S
Wa3 – Identify new models of care
QEa2 – Develop baseline and targets
SFb1 – Refine scope and outputs from the RDM analysis
Tb1 – Establish networks and infrastructure
Fla2 – Review funding mechanisms
Wa2 – Early supported discharge
SFa2 – Services and facilities development projects
Ta2 – Support primary and community Link: S
Wa1 – Implement multi-disciplinary teams (i.e. rapid response team)
SFa1 – Redevelop and refurbish sites
Ta1 – Co-design and implement an EHR Link: Td1
Fla1 – Review partners with Funder
Workforce (W)
Services & Facilities (SF)
Technology (T)
Funding & Incentives (FI)
Started
To be started
Has a linkage
Enablers and Support

	Areas of Focus	Objective	Initiatives	Timing
Models of Care	S. Settings of care	**Sa.** Perform traditional 'hospital / secondary service' activities closer to patient home	**Sa1.** Formalise use of virtual or primary care led Followup & FSA clinics	**Immediate Term**
			Sa2. Increase & support the types and number of procedures perf in community and primary care setting	**Immediate Term**
			Sa3. Explore community based team model (already used in CWF & MH) to selected MHOP & SAS patient communities	**Medium Term**
			Sa4. Explore and trial more primary care facilities (e.g. Integrated Family Centres / one stop clinics for selected conditions or patient communities)	**Medium Term**
			Sa5. Intensify investments in 'one stop clinics' (e.g. service provision from GPs-Specialists-Diagnostic– Allied Health-Procedure Rooms–rehabilitation)	**Longer Term**
		Sb. Support patients to stay and remain well	**Sb1.** Support development of multi-disciplinary community / primary care practices	**Immediate Term**
			Sb2. Formalise supporting pathways (i.e. for discharging patients (e.g. Discharge coordinators / Care orchestrators for complex / chronic patients) and for community / primary care providers (e.g. referral & care advice))	**Immediate Term**
			Sb3. Support use of remote monitoring for selected patients and continue to extend this over time	**Immediate Term**
			Sb4. Create and support patient wellness and a care pathway portal	**Medium Term**
			Sb5. Connect patients to national / global community of 'people & clinicians like you'	**Longer Term**
		Sc. Support specialised care facilities for ambulatory, intermediate, rehab or 'longer' term care	**Sc1.** Trial different types of community based facilities that are focused on different stages of a patients' care pathway when an inpatient secondary care setting is not required	**Immediate Term**
			Sc2. Intensify the use of these non-secondary care facilities which may become focused on the needs of specific target groups (e.g. Maori)	**Longer Term**
		Sd. Support focus on complex, high needs or patients with inequitable health outcomes	**Sd1.** Stream and design patient flow & settings into routine and non-routine primary care services	**Immediate Term**
			Sd2. Stream and design patient flow & settings into routine and non-routine secondary care services	**Medium Term**
			Sd3. Further stream and design patient flow & settings to target focus groups *(link to PCa1)*	**Longer Term**
	PC. Patient Communities	**PCa.** Deliver health services that are tailored to those patient communities who suffer from health inequity i.e. where more focus or specialised care is required	**PCa1.** Collate and finalise health inequality data across the patient communities at WDHB and set targets (e.g. Bohmer patient cohorts, Maori & Pacific, Asian)	**Immediate Term**
			PCa2. Develop different patient experiences and pathways for patient communities who experience more adverse outcomes or health experiences (e.g. Bohmer patient cohorts, Maori & Pacific, Asian)	**Immediate Term**
			PCa3. Assign services, providers and specific care settings to support these vulnerable patient communities *(link to Sd3)*	**Medium Term**
	QE. Quality & Effectiveness	**QEa.** Develop standard approach for pathway	**QEa1.** Standard pathway development and evaluation *(links to PCa1)*	**Immediate Term**
			QEa2. Develop quality baseline & targets to monitor implementation	**Immediate Term**

	Areas of Focus	Objective	Initiatives	Timing
		development and evaluation	**QEa3.** Build clinician community to review and discuss evidence and outcomes	**Medium Term**
			QEa4. Develop and act upon insights and utilise predictive analytics	**Longer Term**
			QEa5. Share data and outcomes with patients *(link with Sb7)*	**Longer Term**
		QEb. Build evidence base to support continuous refinement of HSP	**QEb1.** Continue to analyse literature, evidence & inform HSP changes	**Immediate Term**
			QEb2. Build clinician community to review and discuss evidence and outcomes	**Medium Term**
			QEb3/QEa5. Share data and outcomes with patients *(link with Sb7)*	**Longer Term**
		QEc. Embed a continuous improvement focus	**QEc1.** Standard approach for pathway development and evaluation	**Immediate Term**
			QEc2. Deliver sustainability and quality goals	**Immediate Term**
Enablers and Support	**W. Workforce**	**Wa.** Implement new models of care to support new settings, high focus patient communities and quality outcomes	**Wa1.** Implement 'Front door' multi-disciplinary rapid response team	**Immediate Term**
			Wa2. Support early supported discharge practices	**Immediate Term**
			Wa3. Identify new models to support high focus patient communities, routine & non-routine pathways and new settings	**Immediate Term**
			Wa4. Review of inpatient presence and SMO / registrar sizing for high volume and growth specialities, as well as FTE time required to meet training requirements and to provide consult liaisons and support, and resource mix for key services (i.e. ED)	**Immediate Term**
			Wa5. Pilot & Roll out	**Medium Term**
		Wb. Design new and more specialised roles to support new models	**Wb1.** Ensure training created to support following: • Care orchestration • Primary care specialist liaison & support roles • Multi-disciplinary community / primary care team • Wellness & prevention clinicians	**Immediate Term**
			Wb2/Wa5. Pilot & Roll out	**Medium Term**
	SF. Services & Facilities	**SFa.** Ensure provider facilities are appropriate for population and services changes	**SFa1.** Redevelop and refurbish site and facilities as per Waitemata 2025 programme underway	**Immediate Term**
			SFa2. Intensify ongoing shift towards 24/7 services and develop facilities (e.g. Ambulatory, Medical Tower & Rodney Development Projects)	**Immediate Term**
		SFb. Reflect WDHB aspiration & Regional views on RDM	**SFb1.** Confirm and scope new services and facilities based on initial RDM analysis and potential developments at NSH and WTH (Master Site Planning), as well as predicted bed increases.	**Immediate Term**
			SF b2. Regional alignment on service provision. This includes expanding regional forums and discussions on service provisions across the region	**Immediate Term**

Areas of Focus	Objective	Initiatives	Timing
		SFb3. Implement agreed service development to WTH & NSH & Community in phases	**Immediate Term**
		SFb4. Continue to refine/review RDM outputs and service/facilities impact	**Medium Term**
T. Technology	**Ta.** Deliver a health record that supports care in different settings	**Ta1.** Co-design and implement a regional/national electronic health record and health IT strategy	**Immediate Term**
		Ta2. Support care delivery in primary and community based locations *(link with S)*	**Immediate Term**
	Tb. Ensure infrastructure and other operational support technologies are fit for purpose	**Tb1.** Establish networks and infrastructure that connect providers and patients	**Immediate Term**
	Tc. Deliver a more digital health experience	**Tc1.** Expand rollout of telehealth, eVitals and mobile health (link with Setting of Care initiatives)	**Immediate Term**
	Td. Use of insights and analytics to support prevention and intervention	**Td1.** Explore need for data quality and regional/national analytics *(link with Ta1)*	**Immediate Term**
		Td2. Trial analytics	**Medium Term**
		Td3. Analytics informing at risk and differentiated patient communities, experiences and care designs *(link to PCa1)*	**Longer Term**
FI. Funding & Incentives	**FIa.** Funding is aligned to desired outcomes for all providers	**FIa1.** Work with the funder to review use of partners to deliver health network – other DHBs, private providers and NGOs and agree service development plan	**Immediate Term**
		FIa2. Review funding mechanisms to balance efficiency and sustained quality outcome	**Immediate Term**
		FIa3. Implement Changes	**Medium Term**

Features of the immediate term plan

The immediate term is about effectiveness and quality of care. In simple terms the focus in this period is on improving outcomes of patients once they enter the existing footprint of services, with a number of initiatives targeted at decreasing lengths of stay, standardising care through clear pathways, consolidating the Outcomes Quality Framework, and moving patients more quickly between appropriate settings of care through early supported discharge and transitional models. There is also a focus on establishing the key requirements and building blocks to achieve the medium and longer term goals.

There are a range of programmes and initiatives currently underway that are aligned to these outcomes, and the focus on this period is to expand and intensify these, while adding initiatives as needed. These are outlined in Section 1: Current Initiatives, with additional service level initiatives described in Section 3: Identified trends and responses from the Services.

The headline features within this 0-3 year term are:

Model of care changes:

- **Efficiency in delivery:** Extend ongoing Provider Sustainability work to review and improve utilisation, turnaround times, rosters, and workforce mix across services
- **Step down and transitional care:** Completing ongoing work towards developing early supported discharge models, transitional units, and appropriate alternative care settings for key patient cohorts (i.e. Stroke)
- **Pathways, liaisons, and interdependent services:** Agree a standard approach/methodology for pathway development, implementation and evaluation. Develop ability to track and review growth in liaison demands, and review model of care implementation process to include impacts on other services and support services
- **Patient cohorts identified and plans established:** Leverage ongoing Bohmer streams (i.e. Frail Elderly, Cancer) to establish key patient cohorts and develop cross-specialty care plans and pathways
- **Primary and community care:** Initial transition of 'routine' procedures for Medicine and Surgery to Primary and Community partners (i.e. ongoing Skin GPSI model), and continue to develop community team models and presence for Mental Health and Child, Women, and Family
- **Outpatient / ambulatory review**: Review traditional three month follow-up model and shift towards virtual, telehealth, group, and self-booking models where appropriate to improve patient outcomes and reduce numbers. Conduct a similar review of current FSA appointments and link with one-stop shop, multidisciplinary models being implemented (i.e. ADU / ED front door model)
- **Self-care and preventative care:** Invest in and support patient education, remote monitoring and data collection for highest impact population groups (e.g. patients with cardiovascular disease and diabetes)
- **Evidenced based care:** Continue to respond to and implement innovations and new models of care
- **Quality & outcomes focus:** Consolidate and embed quality outcomes measures within divisions and reporting

Workforce:

- **Workforce sizing and mix:** Review of inpatient presence and SMO / registrar sizing for high volume and growth specialities, as well as FTE time required to meet training requirements and to provide consult liaisons and support, and resource mix for key services (i.e. ED)
- **Rostering improvements / reviews**: Review rosters, lists, and booking process for identified efficiencies

- **Develop roles and talent strategy:** Define roles and mix of workforce to provide care in line with the pathways, and new roles such as navigators, and recruitment strategy in line with new pathways (i.e. Pharmacy, Prescribers, Increasing CNS, and Nurse practitioners)
- **Multi-disciplinary:** Extend multi-disciplinary team development for key patient pathways and cohorts (i.e. stroke medical, nursing, and allied health model)
- **Extending hours for key services:** Implement initial shifts towards 24/7 including SMOs in-house until 8 pm, increasing overnight staff, and consideration to extended hours for nursing, allied health, and support services such as Laboratories and Pharmaceuticals

Technology:

- **IT strategy:** Agreeing and defining the Electronic Health Record IT strategy, and establish WDHB's plan for self-help and preventative enabling technology (i.e. apps, website presence)
- **Best practice:** Continue to invest and development in new technology required to deliver highest care, including diagnostics, pharmacy, labs, and surgical technology
- **Model of care enabling technology:** Continuing to roll out enabling technologies such as E-referrals, telehealth, remote monitoring, eVitals, and iPads for community based teams
- **Reporting and analysis:** Develop required electronic systems to capture and report against outcomes, pathways, and targets. Intensify ongoing work to develop tools and platforms to provide operational intelligence (costing, activity, etc.) beyond what is currently available

Services & Facilities:

- **Site and service planning:** Confirm and scope new services and facilities based on initial RDM analysis and potential developments at NSH and WTH (Master Site Planning), as well as predicted bed increases. This includes expanding regional forums and discussions on service provisions across the region
- **Refurbishment and fit for purpose programme:** Redevelop and refurbish site and facilities as per Waitemata 2025 programme underway

Impacts of the immediate term plan

Over the past four years, WDHB has made substantial progress towards delivering on its purpose and have identified a number of key health outcomes (as discussed within the Outcomes Framework in Section 1) that will ensure WDHB is providing the 'best care for everyone'. Incorporated in this is ensuring that WDHB moves from an outputs or process measure focus towards measuring for outcomes that really make a difference to patients and their families. The quality and effectiveness focus in the immediate term has a number of initiatives targeted at decreasing lengths of stay, standardising care through clear pathways, consolidating the outcomes quality framework outlined in the Introduction, and moving patients more quickly between appropriate settings of care through early supported discharge and transitional models.

Quality and effectiveness

WDHB's quality activities are centred on achieving two key outcomes by 2025. These outcomes are: to achieve the highest life expectancy in New Zealand and to reduce the difference in health outcomes across patient cohorts. In addition to these key outcomes there are additional quality metrics focused around preventing, curing and ameliorating ill health. For further information see Appendix 5.

	Outcome	Measure
WDHB wide	**Highest life expectancy in New Zealand**	An increase in life expectancy at birth
	Reduce difference in health outcomes	A reduction in the ethnic gap in life expectancy at birth
Prevent ill health	**A smokefree Waitemata by 2025**	% of regular smokers
		% of hospitalised patients who smoke are offered brief advice and support to quit
	Halt the rise in obesity	% of adults who are obese
		% of adults meeting physical activity guidelines
	Children get the best possible start in life	Infant mortality per 1,000 live births
		% of 8 month children who are fully immunised
		% of maternal smoking
Cure ill health	**The lowest mortality from cardiovascular disease (CVD)**	CVD mortality rate per 100,000 population
		% of CVD population aged 30+ receiving and adhering to triple therapy
		Sum of Quality Adjusted Life Years gained from coronary artery by-pass grafting and angioplasty (measures the length and quality of extra years gained by a medical/surgical intervention)
	The lowest mortality from cancer	Rate of cancer per 100,000 population
		% of cancer survivors (5 year rate)
Ameliorate ill health	**Reduced morbidity and mortality from mental illness**	Suicide rate per 100,000 population
		% of individuals aged <19 and 20–64 years with access to mental health services
	Older people experience independence and quality of life	% of our older population receiving home-based support or living in aged residential care
		QALYs gained from cataract, knee and hip procedures in our 65+ population
	Patients stay safe in our hospitals	Hospital-standardised mortality ratio
		Central line-associated bloodstream infections per 1,000 line days

Service specific quality measures

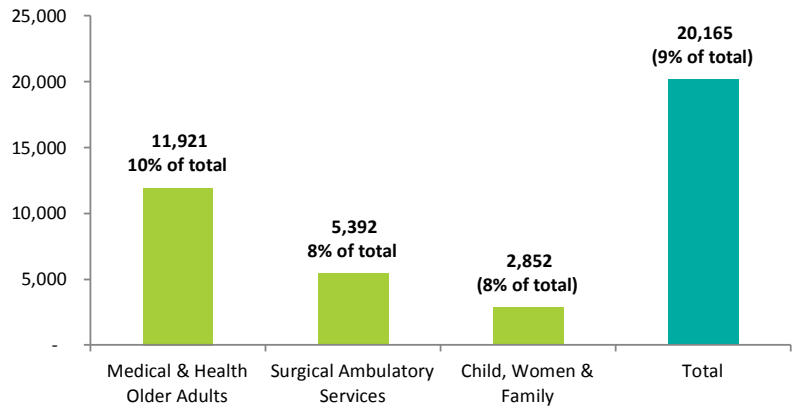
There are a range of service specific and clinically derived excellence metrics currently being developed by the services. A number of Excellence Projects are also currently underway or planned for which for which metrics will be developed. These include the Mortality Project, Standardised pathways of care in General Surgery, Acute Surgery, and 1st procedure of the day.

Details of the latest versions of these metrics are included in Appendix 6.

Impact on inpatient volumes from immediate term activities

In order to quantify the potential impact of these changes on the current inpatient setting over the immediate term, a benchmarking exercise was conducted through including Health Round Table (HRT) data of other similar sized DHBs. This was done by identifying the bedday savings from the top 10 DRGs within HRT (by potential bedday savings) and mapping them to possible immediate term initiatives across the divisions. A further 90% realisation adjuster was applied after comparing lengths of stay from comparable NZ DHBs. This resulted in a potential bedday savings of 15,654 for North Shore and 4,511 for WTH, or a combined total bedday savings for WDHB of 20,165. The below only shows savings through efficiency improvement and do not include the benefits from; preventative care, shift to primary/community care, and reduction in outpatient attendances. See Appendix 7 for the DHB benchmarks that were used to test the HRT findings.

Bedday savings at 90% realisation



Even with these improvements however there will still remain a substantial gap in meeting demand, with status quo trajectory modelling indicating a bed deficit of 330 across all services (234 across medical and surgical services), growth in outpatient volumes by 33%, and a financial gap of greater than $200m by 2025

- If the above beddays are attained it is possible that WDHB would require 56 fewer beds in an inpatient setting in the immediate term[21]. The breakdown is as follows:
- **MHOP:** 33 beds
- **SAS:** 15 beds
- **CWF:** 8 beds
- **Total:** 56 beds

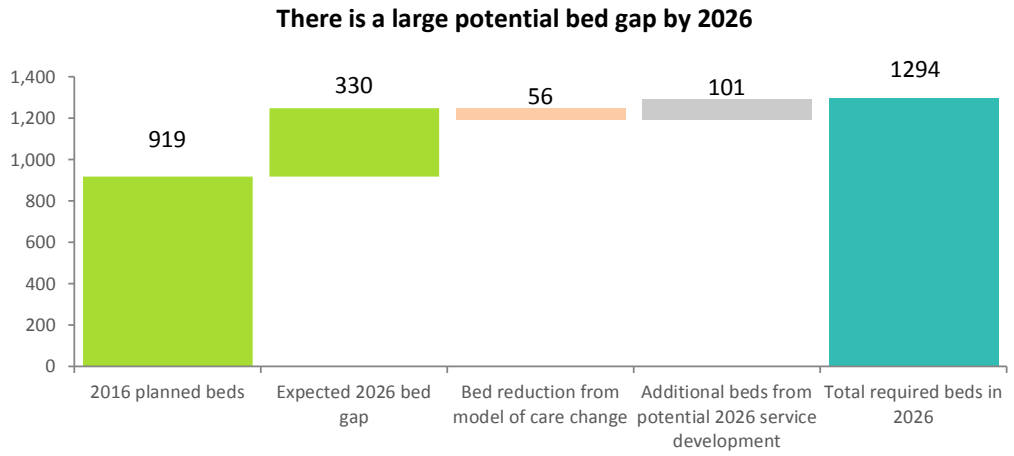
This above beddays saved will allow for some of the 2026 expected gap to be diminished but additional model of care changes or investment is still required to meet the gap.

[21] This is calculated through dividing 90% of total bedday savings by 365 and rounding to the nearest bed. This is indicative only and should be used to facilitate discussions. Mental Health was not included due to both; Average Length of Stay not being an effective means of assessing efficiency against HRT exemplars and due to the different funding model

Future bed requirements

Division	2016 planned beds[22]	Expected 2026 bed gap[15]	Beds under Refurbishment	Bed reduction from model of care change	*Additional beds from potential 2026 service development*	Total potential 2026 bed gap
MHOP	308	134 *(159 with 25 under development)*	*TBD*	33	33	**134**
SAS	191	75	*TBD*	15	51	**111**
Older Adults	111	59	*TBD*	-	-	**59**
MH	86	41	*TBD*	-	-	**41**
Mason Clinic	113	- *(8 with 8 under development)*	*TBD*	-	-	**-**
CWF	110	21	*TBD*	8	17	**30**
Total:	**919**	**330** *(363 with 33 under development)*	*TBD*	**56**	**101**	**375**

Note: Additional beds from potential service developments refers to potential impact on beddays of service level changes as described in the Role Delineation Model Assessment below. See Section 3 for further information



It should be noted that the above modelling does not take into account potential increases in demand and activity from changes to access, intervention rates and thresholds, policy shifts, or model of care changes that increase patient's lengths of stay. These offsetting shifts are estimated to be relatively minor in the immediate term given the vast majority of proposed changes are focused on more effectively moving patients through the hospital system and standardising care, but this modelling should be refined further in the medium to longer term when offsetting shifts in access and model of care changes may have a larger impact.

[22] Taken from the modelling conducted by Ratana Walker with any beds currently under development noted

Impact on outpatient volumes from immediate term activities

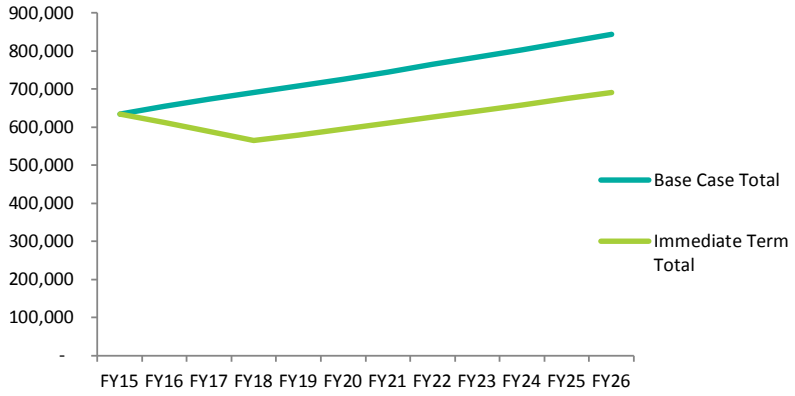
A variety of immediate term initiatives are focused on reducing first attendances and follow up attendances, indicating significantly reduced events when compared to the status quo base case. In order to quantify this impact the relevant initiatives from each Division were mapped to the type of outpatient event they would impact ('Pre admission', 'First attendance', 'Follow up').

The initiatives were then given a rating out of 4 which had a corresponding % reduction in outpatient volumes being;

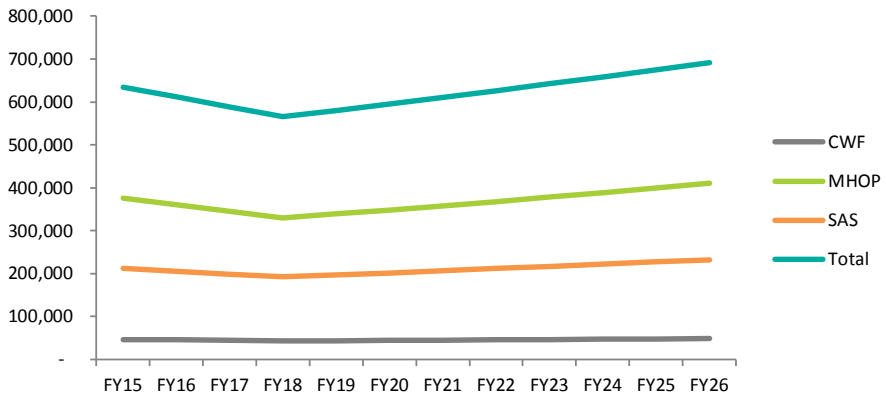
1. No impact (0% adjustment)
2. Minimal initiatives identified that are likely to reduce outpatient volumes (2% adjustment)
3. Some initiatives identified that are likely to reduce outpatient volumes (5% adjustment)
4. Initiatives are identified, detailed, and are likely to reduce outpatient volumes (10% adjustment)

These outpatient volumes were then forecasted for the first three years based on the above adjustments and then were grown based on population growth to 2026. Based on these immediate term assumptions there could be up to 125,000 less outpatient attendances by 2018 when compared to the base case.

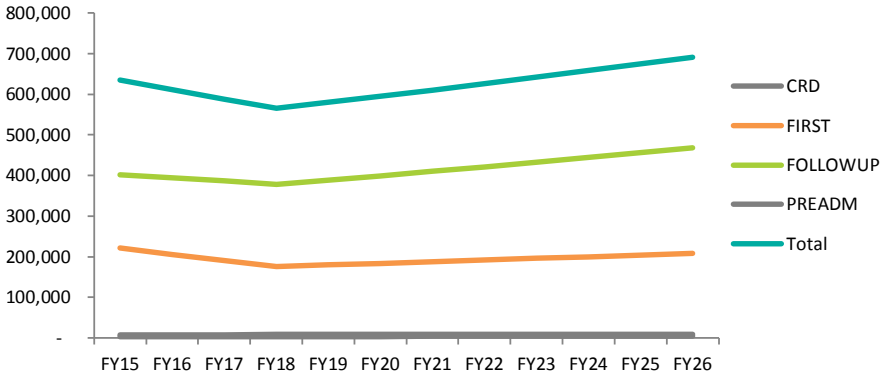
Immediate term outpatient attendances compared to base case to 2026



Projected WDHB outpatient volumes to 2026 by Division



Projected WDHB outpatient volumes to 2026 by type



Similar to the status quo modelling, these estimates do not take into account shifting volumes out of the inpatient setting, burden of disease related changed, or further model of care related changes.

Workforce impacts

In the immediate term it is likely that there will only be a small shift in the workforce and the status quo will remain. The majority of the focus in the immediate term will be on; reviewing workforce need, investigating alternate workforce options, and developing minor new roles and responsibilities for current staff. A potential impact that could occur could be an increase in primary and community nursing and Allied Health roles.

Patient flow impacts

Between DHBS: Inter-district flows will increase as described in the status quo model as any service configuration and facility development decisions will likely not be implemented within the immediate term. However detailed investigation into the service development aspirations touched on within Section 3 will be concluded within the immediate term, and once implemented these changes will have a substantial impact on flows within the Northern region. This is noted as a key next step as part of this HSP.

Between NSH and WTH: Flows from Waitakere Hospital to North Shore Hospital will increase for the majority of Services within MHOP, SAS and MH. Based on the workshop discussions it is likely that there will be increased flows from NSH to WTH for CWF, especially with the shift in volumes for acute Gynaecology and an increase in the flow of elective surgical procedures.

Between services: Patient flows between services will become a more planned and managed experience in the immediate term as Services start to build networks across other Services. This will be done through pathways and model of care changes and will likely provide better patient outcomes. At the end of the immediate term it will be likely that some pathways will have been implemented with an investigation into additional pathways and patient cohorts (e.g. diabetes patients who become renal patients) underway or completed.

Financial sustainability impacts

Recent work in the Provider Sustainability Programme and business cases for model of care changes indicate that the focus on effectiveness and quality over the immediate term have the potential to result in substantial financial efficiencies, particularly as related to bedday savings and reduction in outpatient volumes. Detailed cost and savings implications could not be completed for this version of the HSP due to the limitations in activity based cost accuracy. As key model of care changes are brought to business case, these costs and benefits will need to be aggregated and tracked to form a view of the remaining gap to financial sustainability.

Other potential changes identified in this HSP have potential to increase costs in the short term, particularly the service development discussed in the RDM segment in Section 3 and model of care shifts such as moving towards greater 24/7 coverage. Costs for these key shifts will need to be estimated and prioritisation established as part of the detailed implementation planning in the 'Next Steps' Section.

Features of medium to longer term

Beyond the immediate term, while continued focus is devoted to quality and effectiveness, activities become centred more on preventative care, segmenting care to focus acuity and resources in hospital settings and lower acuity in primary and community, collaborating with community partners and Northern region DHBs for best outcomes, implementing patient centric models of care for key cohorts, investing in alternative workforce models and associated models of care, and investing in connecting technology such as a comprehensive Electronic Health Record.

The headline features within this 3-5 year term are:

Model of care changes:

- **Further intensifying investment in step down and transitional care:** Expand step down model to broader set of patient cohorts, and further establish residential care and at home support
- **Reorient services towards patients and pathways:** Implement interdisciplinary models of care with patient cohorts identified in the immediate term (i.e. home based ward system for General Medicine, ADU / ED front door, expand MDM model along pathways)
- **Self-care and preventative care:** Aligned to outcomes and patient cohorts, development and deployment of technology enabled solutions for patients to access health information, connect with likeminded individuals and engage in preventative care and wellness practices.
- **Development of services in primary and community care:** Intensify transition of 'routine' procedures for Medicine and Surgery to Primary and Community partners, and collocate these services within community settings
- **Inter-sectoral care:** Particularly for Mental Health and Child, Women and Family, strengthening coordination and links with Income and Housing for Adult Mental Health, Education for Child & Youth, and Justice and Police for Forensics.
- **Concentration of hospital acuity and resource:** Movement of lower acuity and risk patients to alternative settings of care enables the hospital setting to concentrate resource specialisation and assets
- **Ambulatory care development:** Moving beyond followup and first specialist assessment improvements to developing same day models and one stop clinics

Workforce:

- **Moving towards 24/7 support:** Increase shift towards 24/7 support, including SMOs, nurses, allied health, and support services
- **SMO coordinating care:** Further refine SMO roles to allow for more prevention and liaison focus, and coordinating across all settings and scope for Nurses, Allied Health, and key support roles
- **New roles and workforce:** Implement new roles and mix of workforce to enables pathways, including navigators, nurse led care, GPs with a Special Interest, prescribing pharmacists and nurses, etc.
- **Continued multi-disciplinary focus:** Further implement multi-disciplinary team development for key patient pathways and cohorts

Technology:

- **Implement EHR Strategy:** Roll out of agreed EHR solution across all WDHB sites and with linkages into primary and community partners
- **Care Enabling Technology:** Continuing to roll out enabling technologies
- **Leverage Digital:** Invest in health, wearables, mobile health technology growth and link in with EHR for preventative care / high risk patient identification and predictive analytics

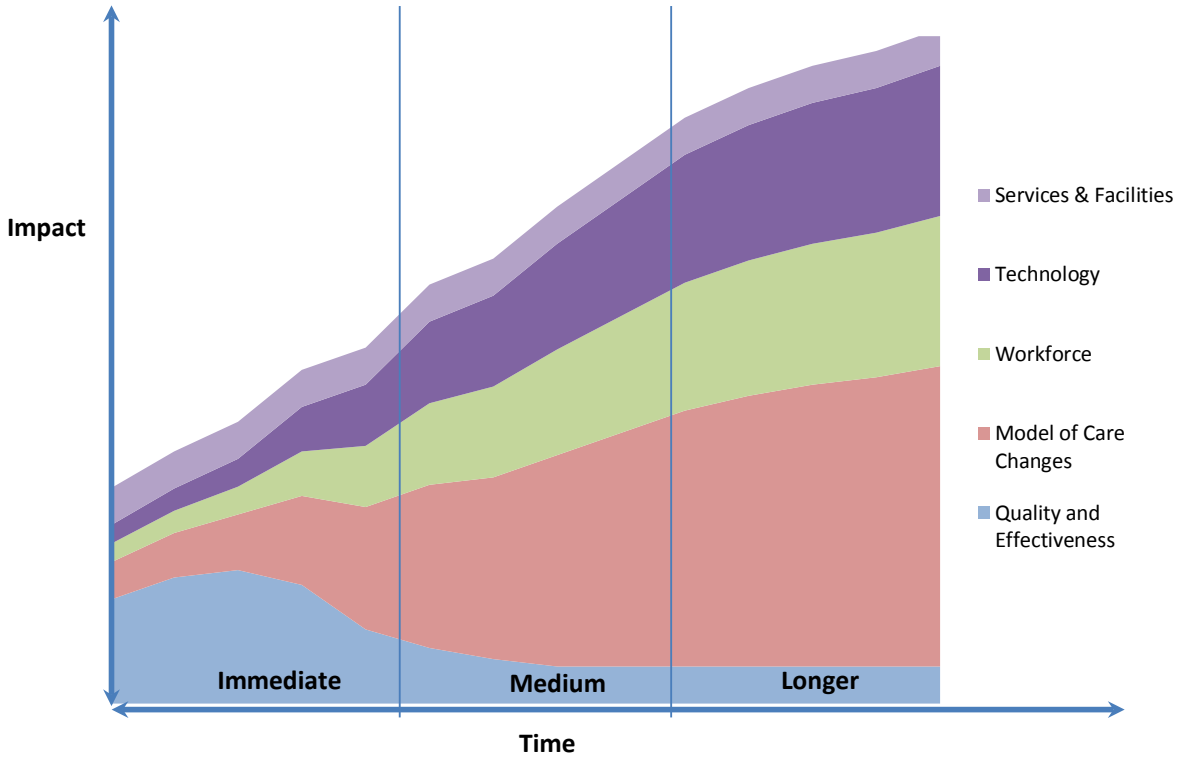
Services & Facilities:

- **Site and service planning:** Confirm and scope new services and facilities based on initial RDM analysis and potential developments at NSH and WTH (Master Site Planning), as well as predicted bed increases. This includes expanding regional forums and discussions on service provisions across the region

Potential impacts of medium to longer term plan

Broadly speaking the changes identified by services indicate the medium to longer term will be driven largely by model of care changes, critically enabled by new technology and workforce roles. However, the uncertain nature of the timing and key drivers in the medium to long term make the impact difficult to quantify. A general review of hospital systems around the globe undergoing similar change, combined with the timings noted in the Section 4 growth path above, has been used to provide an indicative view of this potential impact (Figure below). This will need to be revisited and validated after immediate term activities have been progressed.

Potential impact of Medium to Long Term



Note: *The focus on Quality and Effectiveness does not decrease over time but the effort shifts into other drivers (e.g. Model of Care changes that will deliver the quality outcomes require) and a wider range of impacts are delivered.*

Next steps for this Health Services Plan

As highlighted above, there is a significant step change required from the current state to Waitemata 2025, and a number of shifts will be required in order for WDHB to achieve the end state. Some of the key next steps required following this Section of the HSP are described below.

1. **Further Health Services Planning for regional and primary / community services:** The scope of this stage of the HSP is limited to provider led services at WDHB, and a number of key trends and service responses pointing towards growing services within the community and collaborating more effectively regionally, additional planning and engagement needs to occur alongside community and regional DHB partners to identify the challenges and responses required over the next 10 years
    a. **Metro Auckland development plan:** A regional plan needs to be developed for service growth and investment across Auckland. This additional planning will need to include extending and validating the potential service development findings within this HSP
    b. **Primary and community services plan:** Working with primary and community partners to extend the hospital's identified initiatives and confirm plans around preventative, wellness, and segmentation of care. This will have a focus particularly on health inequalities for key patient cohorts (i.e. Maori and Pacific)
2. **Operational planning & prioritisation of immediate term initiatives:** Due to the large number of immediate term initiatives identified by services it is essential that they are prioritised and that a detailed plan is developed which builds towards the medium to long term goals
3. **Master site planning and facilities development:** Taking forward the services, facilities, and model of care changes identified in this HSP to develop a master site plan and associated business cases and submissions of capital plans
4. **Model of care changes:** Coordinating and prioritising the large number of potential model of care and patient cohort changes identified in this HSP
5. **Sustainability and financial stream:** Addressing the potential financial sustainability gap identified in this HSP by extending the ongoing Provider Sustainability Programme and ensuring appropriate measures, KPIs, and financial benefits are in place (to be led jointly by the CFO / Funder). Developing and accessing detailed business cases to progress developments identified in this HSP
6. **Technology strategy and roadmap:** With technology set to play an essential role over the next 10 years, a clear roadmap for investment and roll out is required to make sure model of care changes and facilities developments are appropriately enabled
7. **Workforce planning and talent strategy:** A key dependency of any future development is the ability to attract and retain an appropriately-trained workforce, while a number of model of care changes are contingent on the implementation of new roles and refocusing of current ones. This will require a detailed strategy to ensure the right people and roles exist to enable Waitemata 2025

Beyond these key next steps, there is a need to build a continuous review and update to the next and subsequent versions of the HSP as WDHB steps closer to 2025.

Appendix 1: Method & process

Data and research

A Health Services Planning process was conducted over a four month period comprising a review of relevant international and national research and data, review of relevant policy and strategy, and extensive engagement with service providers and senior management within the WDHB catchment.

- **Policy and strategy documents:** The following policy documents were reviewed in the preparation of this HSP:
    - Health Needs Assessment 20015
    - WDHB Annual Plan 2015/16
    - WDHB Statement of Intent 2015/16
    - Maori Health Plan 2015/16
    - Asian Health Needs
    - Minister of Health's expectations and priorities 2015/16
    - Northern Region Health Plan 2015/16
    - Regional Capital Plan
    - WDHB Site Master Plan 2009[23]
- **Demographic data:** An inpatient bed model to forecast bed demand to 2026 was conducted by Ratana Walker and used as the basis for inpatient bed projections. This model is based on historical bed-day data and projecting forward the required beds using Statistics NZ produced population projections for WDHB
- **Consultation with service providers:** Over 30 workshops were held across a number of specialities within the Provider services to foster clinical engagement, confirm current state and co-develop key future considerations. A 'Market Day' was held to present initial findings of the planning process to participants of the workshops and to solicit implications on a number of support services resulting from these potential changes. The level of engagement from the services was deemed necessary to ensure this HSP is capable of being continuously updated with input from the people who are involved with the service delivery
- **Consultation with senior management:** A Senior Management Team retreat was held to brainstorm high level service development aspirations. These were then tested where possible based on volume, activity and utilisation against appropriate levels as indicated by the NZ Role Delineation Models, as well as key service accreditation documents
- **Workshop with key community stakeholders:** Engagement with key community stakeholders and partners was conducted to gain feedback on the key features of this HSP and set the foundation for more detailed considerations of community interfaces and planning of appropriate segmentation of care within the community
- **External data and research:** A variety of external sources were used in order to inform this HSP. Primarily these sources were used to inform the: financial analysis, benchmarking and features within the immediate, medium and longer term. In particular, the following sources were used:
    - The Health Round Table: This is a not for profit organisation with the aim to; provide opportunities for health executives to learn how to achieve best practice in their organisations, promote interstate and international collaboration and networking amongst health organisation executives and suppliers of goods and services to the industry, and collect and analyse organisational data to identifying innovations and ways to improve operational

[23] This will be updated in response to the HSP.

practices. This source was used to identify bedday savings in the inpatient setting for NSH and WTH

- The National Costing Collection and Pricing Programme (NCCPP) data cubes: These cubes are used to produce an annual national price book for hospital services and it also provides event-level costing information which can be used for benchmarking, productivity, planning, and funding purposes. This source was used for data analysis and benchmarking
- National Minimum Data-set (hospital events) (NMDS): The National Minimum Dataset (NMDS) is a national collection of public and private hospital discharge information, including coded clinical data for inpatients and day patients. This source was used for data analysis and benchmarking
- The Kings Fund: This is an independent charity working to improve health and health care in England. It helps to: shape policy and practice through research and analysis, develop individuals, teams and organisations, promote understanding of the health and social care system, and bring people together to learn, share knowledge and debate. Its vision is that the best possible care is available to all. This source was used to identify innovations in healthcare that could be applied to WDHB
- Hospitals across England and Australasia: Hospitals such as The Alfred, NHS Airdale, Kaiser Permanente and others were used to identify significant model of care changes and inform a variety of the features within the immediate, medium and longer term

Time horizon

The HSP is written to span a ten-year time frame, ending in 2025. For simplicity, the HSP references three time horizons within this frame.

- The **'immediate term'** is classified as 0-3 years following the commencement of the HSP. Actions in this period will predominantly relate to those which are already in train as well as those which address matters of high urgency
- The **'medium term'** is classed as 3-5 years following the commencement of the HSP. Actions in this period will address matters which are of moderate urgency, and relatively higher importance. Actions that are written into this timeframe will also be considered to be achievable – from planning through to execution within this period
- The **'longer term'** is classed as 5-10 years following the commencement of the HSP. Actions addressed in this period will be those requiring longer lead-times for planning as well as those which address challenges that are anticipated but are yet to materialise

Appendix 2: Financial projection assumptions

Costs were forecasted using the below assumption tables across a variety of sources.

Revenue had no definite forecasts possible for revenue uplifts as even demographic growth is only lightly correlated with PBFF amounts divided amongst the DHBs each year. However, there is a current maximum and minimum Funding Envelope established from 1.5% to 4.25% - i.e. the minimum amount 'low growth' DHBs receive compared to the maximum amount 'high growth' DHBs receive (4.25%). WDHB has always been in the upper boundary / quartile of this range and it was assumed that this was likely to continue as a high growth DHB.

Growth Estimates	Estimate	Source
Inflation		
Medical products, appliances and equipment	1.94%	Stats NZ
Out-patient services	2.72%	Stats NZ
Hospital services	2.29%	Stats NZ
Accommodation	1.95%	Stats NZ
Transport	-0.02%	Stats NZ
Average	1.28%	Stats NZ
Revenue Growth		
FY 16 Growth Rate	*2.07%*	Funder / MoE
Government and Crown Agency	3.00%	Funder / MoE
Patient / Consumer	3.00%	Funder / MoE
Other income	3.00%	Funder / MoE

Population Growth - Stats NZ												
Year	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Avg Growth Estimate	1	2.3%	2.0%	1.7%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%
Adjusted by Age Growth	1	3.9%	3.7%	3.4%	3.3%	3.4%	3.5%	3.5%	3.4%	3.3%	3.4%	3.4%

Appendix 3: Role Delineation Model

Medicine

Several sub-specialities comprise medical services. Under the RDM, medical services comprise:

- General medicine
- Palliative Care Medicine
- Renal Medicine
- Respiratory Medicine
- Cardiology
- Genetics & Metabolic medicine
- Immunology
- Neurology
- Dermatology
- Diabetes and Endocrinology
- Gastroenterology
- Infectious disease
- Rheumatology

Overall, NSH ranks as a level 4 provider of medical service and WTH ranks as a level 3 provider – both are in alignment with their future states. Medicine, however, is a broad service category, and within its many sub-specialities, both facilities in some instances currently fall short of their future state.

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system. In some instances, the future state is marked higher than the overall ranking for the service. This reflects the findings from service level workshops and the Senior Management Retreat.

NSH Medicine: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
General medicine				●	⊕		H
Palliative Care Medicine				●	⊕		M
Renal Medicine				●	⊕		M
Respiratory Medicine				●	⊕		H
Cardiology				●	⊕		M
Genetics & Metabolic medicine			●	⊕			M
Immunology	●			⊕			H

To be validated

Neurology							M
Dermatology							L
Diabetes and Endocrinology							L
Gastroenterology							L
Infectious disease							L
Rheumatology							L

WTH Medicine: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
General medicine							L
Palliative Care Medicine							L
Renal Medicine							L
Respiratory Medicine							L
Cardiology							L
Genetics & Metabolic medicine							L
Immunology							H
Neurology							L
Dermatology							L
Diabetes and Endocrinology							L
Gastroenterology							L
Infectious disease							L
Rheumatology							L

To be validated

Key changes, Medicine

	NSH	WTH
General medicine *Through workshop feedback and the Medical Blueprint there is a desire to improve General medicine at NHS to a Level 5 service. The RDM analysis did not reveal a need to update the general medicine service at WTH.*		
Current	Level 4	Level 3
Aspiration	Level 5	Level 3
Transition	• Consultations available from other medical sub-specialists which must include neurology • Planned access to Nuclear Medicine services that provide therapeutic administration of high-dose radiopharmaceuticals	-
Interdependent upgrades to other services/supports	• Access to Level 5 palliative care, renal medicine and respiratory medicine services on site	-
Palliative care *In order to improve NSH to a level 5 General medicine facility this service would need to be improved to level 5.*		
Current	Level 4	Level 3
Aspiration	Level 5	Level 3
Transition	-	-
Interdependent upgrades to other services/supports	• Formal links with oncology, radiotherapy, anaesthetics, psychiatry, multidisciplinary pain, clinic, rehabilitation and surgical services • Access to a level 5 General medicine service on site	-
Renal medicine *In order to improve NSH to a level 5 General medicine facility this service would need to be improved to level 5.*		
Current	Level 4	Level 3
Aspiration	Level 5	Level 3
Transition	• All types of dialysis available including treatment of patients requiring incentre haemodialysis • Renal biopsies performed • Inpatient admissions under a renal specialist • Specialist nephrologist, rostered normal working hours and rostered on call after hours	-
Interdependent upgrades to	• Access to a level 5 General medicine	-

To be validated

	NSH	WTH
other services/supports	service on site	
Respiratory medicine *In order to improve NSH to a level 5 General medicine facility this service would need to be improved to level 5. This would require a large investment as to reach a level 5 NSH would require level 5 Cardiothoracic Surgery and Cardiology Services.*		
Current	Level 4	Level 3
Aspiration	Level 5	Level 3
Transition	• A comprehensive respiratory service • Specialist respiratory physician, rostered normal working hours and rostered on call after hours	-
Interdependent upgrades to other services/supports	• Access to a level 5 General medicine, Cardiothoracic Surgery and Cardiology Services service on site	-
Cardiology *In order to improve NSH to a level 5 General medicine facility this service would need to be improved to level 5.*		
Current	Level 4	Level 3
Aspiration	Level 5	Level 3
Transition	• Provides complex cardiology services including removal of pacing wires, cardiac biopsies and mitral & aortic valvuloplasty • Cardiac Catheter Laboratory on site	-
Interdependent upgrades to other services/supports	• Access to a level 5 General medicine, service on site	-
Genetics and Metabolic medicine *This area was not identified in workshops as a critical area nor through analysis of IDF volumes as a major area for upgrade. Substantial changes would be required if this area were to be brought up to a level 4 alongside all other medical services in NSH.*		
Current	Level 3	Level 3
Aspiration	Level 4	Level 3
Transition	• Provision of an ambulatory genetic service • Services provided by an associate or certified genetic counsellor • Counselling and diagnostic services provided by a clinical geneticist in normal working hours	-
Interdependent upgrades to other services/supports	-	-
Immunology *This area was not identified in workshops as a critical area nor through analysis of IDF volumes as a major area for upgrade. Substantial changes would be required if this area were to be brought up to a level 4 and 3 for NSH and WTH alongside all other medical services in NSH.*		
Current	Level 1	Level 1
Aspiration	Level 4	Level 3
Transition	• Provision of an outpatient immunology	• Provision of an outpatient immunology service (on a visiting basis)

To be validated

	NSH	WTH
	service (on a visiting basis) • Immunology specialist available normal working hours	• normal working hours
Interdependent upgrades to other services/supports	-	-
Neurology *This service was identified during both the workshops and through IDF analysis. In 2014, 100% of total volumes in 2014 were IDF – 99% of the 293 events on WDHB patients were conducted by ADHB.*		
Current	Level 3 service (does not require specialist neurologist to be employed)	Level 3 service
Aspiration	Level 4 service	Level 3 service
Transition	• Employ a specialist neurologist at all normal working hours	-
Interdependent upgrades to other services/supports	-	-

To be validated

Emergency Medicine

Emergency Services are key entry points into acute care working at the nexus between the community, general practice and hospitals.

Currently, the NSH operates a level 5 Emergency Medicine Service and WTH operates a level 2 Emergency Medicine Service.

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system.

NSH Emergency Medicine: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Emergency Medicine							L

WTH Emergency Medicine: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Emergency Medicine							M

Key changes, Medicine

	NSH	WTH
Emergency Medicine *Though WTH is currently used as a secondary support hospital to NSH, it has substantial ED volumes. A higher capability ED will support this site in its role for the MHOP division.*		
Current	Level 5	Level 2
Aspiration	Level 5	Level 3
Transition	-	• Manages all emergencies including stabilisation and ventilation • Experienced Medical Officers trained in resuscitation rostered on-site 24 hours
Interdependent upgrades to other services/supports	-	• Level 3 or higher general medicine, general surgery and paediatrics (unless children are diverted to paediatric ED)

To be validated

Oncology and Haematology services

Three sub-specialities comprise Oncology and Haematology services under the RDM:

- Medical Oncology
- Radiation Oncology
- Clinical Haematology

Currently, NSH operates a level 4 Clinical Haematology service but a level 1 Medical and Radiation Oncology Service. WTH operates a level 1 Medical and Radiation Oncology Service and a level 2 Clinical Haematology service.

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system.

NSH Oncology and Haematology: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Medical Oncology	●				⊕		H
Radiation Oncology	●				⊕		H
Clinical Haematology				● ⊕			L

WTH Oncology and Haematology: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Medical Oncology	●		⊕				H
Radiation Oncology* (level 1-3 is no service)			● ⊕				L
Clinical Haematology		●	⊕				M

Both NSH and WTH require substantial upgrades to Oncology and Haematology services if they are to be aligned with their future level of operation.

Key changes, Oncology and Haematology

	NSH	WTH
Medical Oncology *As of 2014, there were 1,143 events conducted on WDHB patients. This speciality currently has visiting specialists running clinics at North Shore Hospital with all other patients being referred to ADHB. 100% of total volumes were IDF and 99% of the 1,143 total events*		

To be validated

	NSH	WTH
on WDHB patients were conducted by ADHB. This service is required to become a level 5 to operate a level 5 Cardiothoracic service		
Current	Level 1	Level 1
Aspiration	Level 5	Level 3
Transition	• Provides most inpatient and outpatient chemotherapy treatment • Inpatient beds available for admission under specialist medical oncologist • Specialist oncologists rostered in extended hours with rostered on-call for after hours	• Chemotherapy administered in a medical day stay facility • Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care
Interdependent upgrades to other services/supports	• Has on-site access to Palliative Care Specialist support	• Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care • Level 3 General Medicine Service on site • Anaesthetics level 3 (from level 2) • ICU level 3 (from level 2) • CCU level 3 (from level 2)
Radiation Oncology *This service is required to become a level 5 to operate a level 5 Cardiothoracic service*		
Current	Level 1	Level 1
Aspiration	Level 5	Level 3 (No service)
Transition	• Has access to full radiation treatment planning and support • On site linear accelerator • Inpatient beds available for admission under specialist radiation oncologist for all forms of complications • Radiation oncologists rostered in normal working hours	-
Interdependent upgrades to other services/supports	• Is part of an on-site comprehensive cancer service including medical oncology, haematology and palliative care	-
Clinical Haematology		
Current	Level 4	Level 2
Aspiration	Level 4	Level 3
Transition	-	• Basic haematology treatments administered in a medical day stay facility
Interdependent upgrades to other services/supports	-	• Is part of a comprehensive cancer service network including medical oncology, radiation oncology, haematology and palliative care • Level 3 General Medicine Service on site • Anaesthetics level 3 (from level 2) • ICU level 3 (from level 2)

To be validated

Surgical Specialities

Several sub-specialities comprise medical services. Under the RDM, medical services comprise:

- General Surgery
- Cardiothoracic
- ENT/ORL (Otorhinolaryngology)
- Gynaecology
- Neurosurgery
- Ophthalmology
- Oral Health & Maxillo Facial
- Orthopaedics
- Plastic Surgery (incl. Burns)
- Urology
- Vascular Surgery
- Interventional Radiology* (Included and removed from Patient Clinical Support Services)

Overall, NSH ranks as a level 4 provider of medical service and WTH ranks as a level 2 provider – NSH is in alignment with its future state with some room for development for WTH. Surgical, however, is a broad service category, and within its many sub-specialities, both facilities in currently fall short of their future state.

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system. In some instances, the future state is marked higher than the overall ranking for the service. This reflects the findings from service level workshops and the Senior Management Retreat.

NSH Surgical: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
General Surgery					●		L
Cardiothoracic			●		○		H
ENT/ORL (Otorhinolaryngology)			●	○			M
Gynaecology				●			L
Neurosurgery			●	○			H
Ophthalmology			●	○			M
Oral Health & Maxillo Facial		●		○			H
Orthopaedics				●			M
Plastic Surgery (incl. Burns)			●	○			M

To be validated

Urology							M
Vascular Surgery							M
Interventional Radiology							L

WTH Surgical: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
General Surgery							M
Cardiothoracic							H
ENT/ORL (Otorhinolaryngology)							M
Gynaecology							M
Neurosurgery							H
Ophthalmology							M
Oral Health & Maxillo Facial							H
Orthopaedics							M
Plastic Surgery (incl. Burns)							M
Urology							M
Vascular Surgery							M
Interventional Radiology							L

Key changes, Surgical

	NSH	WTH
General Surgery *This service was identified during the workshops. In 2014, there were 10,525 total events conducted at NSH. In 2015 there were 1,117 discharges from NSH where the patient started in the WTH ED indicating a need to improve this Service to a level 3 at WTH.*		

To be validated

	NSH	WTH
Current	Level 5	Level 2
Aspiration	Level 5	Level 3
Transition	-	• Up to intermediate surgery on medium risk patients and some complex surgery on low risk patients • General surgeon rostered on site normal working hours and rostered on-call after hours • Medical Officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Cardiothoracic *This service was identified during both the workshops and through IDF analysis. In 2014, 100% of total volumes were IDF and the 492 total events were conducted by ADHB. Due to the requirements of a level 5 Cardiothoracic service for a level 5 General medicine service a large shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 1
Aspiration	Level 5	Level 3
Transition	• Thoracic and emergency cardiothoracic procedures (e.g. closed pulmonary embolectomy) provided • Thoracic/Cardiothoracic Surgeons rostered normal hours	-
Interdependent upgrades to other services/supports	• Access to a level 5 medical and radiation oncology service	• Access to a level 3 General Surgical, service on site • Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
ENT/ORL (Otorhinolaryngology) *This service was identified during both the workshops and through IDF analysis. In 2014, 52% of total volumes were IDF which equate to 1,664 events of the 3,206 total events. A shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 2
Aspiration	Level 4	Level 3
Transition	• Up to complex surgical procedures on medium risk patients • ENT/ORL surgeon available normal working hours and rostered on-call after hours	• Up to intermediate ENT/ORL surgical procedures on low or medium risk patients. Excluding neuro-otic or intracranial surgery • ENT/ORL surgeon available normal working hours. May be part of a regional service • Medical Officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Gynaecology *This service was identified during the workshops. In 2014, there were 4,566 total events conducted at NSH. In 2015 there were 351*		

To be validated

	NSH	WTH
discharges from NSH where the patient started in the WTH ED indicating a need to improve this Service to a level 3 at WTH.		
Current	Level 4	Level 2
Aspiration	Level 4	Level 3
Transition	-	• Intermediate gynaecological procedures on low or medium risk patients and complex procedures on low risk patients • Specialist Gynaecologists rostered in normal working hours with rostered on-call for after hours • Medical Officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Neurosurgery *This service was identified through IDF analysis. In 2014, 100% of total volumes were IDF and the 474 total events were conducted by ADHB. A shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 1
Aspiration	Level 4	Level 3
Transition	• Outpatient consultations by a neurosurgeon during normal working hours • Minor and intermediate neurosurgical procedures on low or medium risk patients • Neurosurgeon available for emergency consultations during normal working hours	-
Interdependent upgrades to other services/supports	-	• Access to a level 3 General Surgical, service on site • Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Ophthalmology *This service was identified during both the workshops and through IDF analysis. In 2014, 100% of total volumes were IDF and the 3,146 total events were conducted by ADHB. A shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 1
Aspiration	Level 4	Level 3
Transition	• Complex surgical ophthalmology procedures on low or medium risk patients • Ophthalmologist on site normal working hours and rostered on-call after hours • Has Surgical Registrars or equivalent on site for extended hours and on-call overnight	• Intermediate ophthalmology procedures on low or medium risk • Ophthalmologist available normal working hours. May be part of regional service
Interdependent upgrades to other services/supports	-	• Access to a level 3 General Surgical, service on site • Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)

To be validated

	NSH	WTH
Oral Health/Maxillofacial *This service was identified through IDF analysis. In 2014, 100% of total volumes for the 'Inpatient Dental Treatment' service were IDF and the 1,000 total events were conducted by a variety of providers. A large shift would be required to improve this service at both NSH and WTH.*		
Current	Level 2	Level 2
Aspiration	Level 4	Level 3
Transition	• Emergency and specialist oral health care for inpatients • Facilities for general anaesthesia for day surgery or longer admission • Medical Officer or RMO rostered on site 24 hours	• Specialist care provided by dentists with specialist experience or by dental specialists during normal working hours
Interdependent upgrades to other services/supports	-	• ICU Level 3 (from 2)
Orthopaedics *This service was not highlighted during the workshops or IDF analysis. To improve this service at WH a shift would be required.*		
Current	Level 4	Level 2
Aspiration	Level 4	Level 3
Transition	-	• Minor and intermediate orthopaedic surgical procedures on low or medium risk patients • Orthopaedic surgeon rostered on site normal working hours and rostered on-call after hours • Medical Officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Plastic Surgery *This service was identified during both the workshop (with a focus on Breast) and through IDF analysis. In 2014, 100% of total volumes for the 'Plastic and Burns' service were IDF and the 1,205 total events were conducted by CMDHB. A large shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 1
Aspiration	Level 4	Level 3
Transition	• Up to intermediate plastic surgery procedures on low or medium risk patients performed • Specialist plastic surgeons available normal working hours • Has designated General Surgical Registrars or equivalent on site for extended hours and on-call overnight	• Outpatient consultations by plastic surgeon during normal working hours. May be visiting And/or • Minor procedures on low or medium risk patients by a plastic or general surgeon. May be visiting
Interdependent upgrades to other services/supports	-	And/or • Access to a level 3 General Surgical, service on site

To be validated

	NSH	WTH
Urology *This service was identified during both the workshops and through IDF analysis. In 2014, 47% of total volumes for this service were IDF which equate to 829 events of the 1,780 total events. A large shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 2
Aspiration	Level 4	Level 3
Transition	• Complex urological procedures on low or medium risk patients • Urologists on site normal working hours and rostered on-call after hours • Has surgical Registrars, or equivalent, on site for extended hours and on-call overnight	• Minor and intermediate urological procedures on low or medium risk patients • Urologist available normal working hours. May be part of a regional service
Interdependent upgrades to other services/supports	-	• Access to a level 3 General Surgical, service on site • Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)
Vascular Surgery *This service was identified during both the workshops and through IDF analysis. In 2014, 100% of total volumes for this service were IDF and the 637 total events were conducted by ADHB. A large shift would be required to improve this service at both NSH and WTH.*		
Current	Level 3	Level 1
Aspiration	Level 4	Level 3
Transition	• Complex diagnostic and treatment procedures on all risk patients including an acute aortic aneurism service • Vascular Surgeons rostered normal hours and on-call after hours • Vascular Registrars or equivalent on site 24 hours	-
Interdependent upgrades to other services/supports	-	• Access to a level 3 General Surgical, service on site • Anaesthetics level 3 (from 2) • ICU Level 3 (from 2) • CCU to level 3 (from 2)

Paediatric Services

Seven sub-specialities comprise Paediatric services under the RDM:

- Paediatric Medicine & other Medical Subspecialties
- Paediatric General Surgery
- Paediatric Cardiology & Cardiac Surgery
- Paediatric Oncology & Haematology
- Paediatric Neurology & Neurosurgery
- Paediatric ORL / ENT
- Paediatric Orthopaedics

Currently, NSH operates a level 2 Paediatric service with WTH operating a level 3 Paediatric service.

To be validated

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system.

NSH Paediatrics: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Paediatric Medicine & other Medical Subspecialties		●	⊕				M
Paediatric General Surgery	●		⊕				M
Paediatric Cardiology & Cardiac Surgery	●		⊕				M
Paediatric Oncology & Haematology	●		⊕				M
Paediatric Neurology & Neurosurgery	●		⊕				M
Paediatric ORL / ENT			● ⊕				L
Paediatric Orthopaedics	●		⊕				M

WTH Paediatrics: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Paediatric Medicine & other Medical Subspecialties			● ⊕				L
Paediatric General Surgery	●		⊕				M
Paediatric Cardiology & Cardiac Surgery	●		⊕				M
Paediatric Oncology & Haematology			● ⊕				L
Paediatric Neurology & Neurosurgery	●		⊕				M
Paediatric ORL / ENT		●	⊕				L
Paediatric Orthopaedics	●		⊕				M

Key changes, Paediatrics

To be validated

	NSH	WTH
Paediatric Medicine & other Medical Subspecialties		
Current	Level 2	Level 3
Aspiration	Level 3	Level 3
Transition	• Inpatient and outpatient specialist paediatric medical care for all children • Specialist paediatricians on site normal business hours • Medical Officer rostered on site 24 hours	-
Interdependent upgrades to other services/supports	-	-
Paediatric General Surgery		
Current	Level 1	Level 1
Aspiration	Level 3	Level 3
Transition	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by General Surgeons. May be a visiting specialist paediatric surgical service • Medical officer rostered on site 24 hours	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by General Surgeons. May be a visiting specialist paediatric surgical service • Medical officer rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaes and ICU/HDU level 3 (From 2)
Paediatric Cardiology & Cardiac Surgery		
Current	Level 1	Level 1
Aspiration	Level 3	Level 3
Transition	• Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting	• Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting
Interdependent upgrades to other services/supports	• Level 3 Paediatric Medical Service	• Level 3 Paediatric Medical Service
Paediatric Oncology & Haematology		
Current	Level 1	Level 3
Aspiration	Level 3	Level 3
Transition	• General paediatrician with an interest in paediatric oncology in normal business hours • Supports some outpatient paediatric chemotherapy • Participates in disease surveillance and late effects monitoring for children and adolescents	-
Interdependent upgrades to other services/supports	-	-
Paediatric Neurology & Neurosurgery		

To be validated

	NSH	WTH
Current	Level 1	Level 1
Aspiration	Level 3	Level 3
Transition	• Provides a neurology outpatient consultation service by a neurologist. May be visiting	• Provides a neurology outpatient consultation service by a neurologist. May be visiting
Interdependent upgrades to other services/supports	• Provided by a Level 3 Paediatric Medical Service	• Provided by a Level 3 Paediatric Medical Service • Anaes and ICU/HDU level 3 (From 2)
Paediatric ORL / ENT		
Current	Level 3	Level 2
Aspiration	Level 3	Level 3
Transition	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaes and ICU/HDU level 3 (From 2)
Paediatric Orthopaedics		
Current	Level 1	Level 1
Aspiration	Level 3	Level 3
Transition	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service • Medical officer or RMO rostered on site 24 hours	• Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year • Except in emergencies, children under the age of one year are not admitted • Performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service • Medical officer or RMO rostered on site 24 hours
Interdependent upgrades to other services/supports	-	• Anaes and ICU/HDU level 3 (From 2)

Maternity and Neonates

Two sub-specialities comprise Maternity and Neonatal services under the RDM:

- Maternity/Obstetrics Care
- Neonatal Services

The SMT identified that WTH would remain the main site for Maternity and Paediatrics to 2025.

Currently, NSH operates a level 4 Maternity and Neonates Service. WTH operates a level 3 Maternity and Neonates Service.

The tables below summarise the current and future state of WTH and NSH in accordance with the RDM ranking system.

To be Validated

NSH Maternity and Neonates: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Maternity/Obstetrics Care							L
Neonatal Services							L

WTH Maternity and Neonates: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Maternity/Obstetrics Care							L
Neonatal Services							L

To be validated

Older Adults and Rehabilitation

Several sub-specialities comprise Older Adults and Rehabilitation. Under the RDM, these are:

- Health of Older Adults
- Specialist Rehabilitation
- Mental Health Services for Older Adults

Overall, NSH ranks as a level 4 provider of medical service and WTH ranks as a level 3 provider – both are in alignment with their future states. Older Adults and Rehabilitation, however, is a broad service category, and within its sub-specialities, both facilities in some instances currently fall short of their future state.

The tables below summarise the current and future state of NSH and WTH in accordance with the RDM ranking system. In some instances, the future state is marked higher than the overall ranking for the service. This reflects the findings from service level workshops and the Senior Management Retreat.

NSH Older Adults and Rehabilitation: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Health of Older Adults					●		L
Specialist Rehabilitation		●		○			M
Mental Health Services for Older Adults						●	L

WTH Older Adults and Rehabilitation: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Health of Older Adults			●				L
Specialist Rehabilitation		●	○				M
Mental Health Services for Older Adults			●				L

Key changes, Older Adults and Rehabilitation

	NSH	WTH
Specialist Rehabilitation		
Current	Level 2	Level 2
Aspiration	Level 4	Level 3

To be validated

	NSH	WTH
Transition	• Designated inpatient rehabilitation unit • Specialist Medical Officer with training in rehabilitation medicine responsible for patient care available normal business hours	• Inpatient and outpatient specialist rehabilitation programs • Inpatient care in which the goal is functional restoration following an episode of trauma, injury and/or medical illness • Medical officers or RMO available on-site 24 hours
Interdependent upgrades to other services/supports	• Has dedicated inter-disciplinary teams with specific expertise in dedicated rehabilitation programs. May be orthopaedic, neurological etc.	• Senior Medical Officer of designated specialty (e.g. medicine, orthopaedics) available normal business hours

To be validated

Clinical Support Services

The RDM refers to a grouping of 'Clinical Support Services'. The levels of these support services are often linked to the acuity of the patient and the number of acutely ill patients admitted to the facility. Clinical support services comprise:

- Pathology
- Pharmacy
- Diagnostic Imaging (excluding interventional radiology)

As they are clinical supports to the other services provided within a facility, it is appropriate that their level of complexity reflects the requirements of other services within the facility. For each of the sub-services above, the RDM specifies the level of each clinical support service required. The level of clinical support service provided within a facility should, therefore, reflect the highest requirement across all other services provided within that facility.

The tables below assess the current state and future state – as defined in accordance with the future level of all other services – for clinical support services.

NSH Patient Support Services: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Pathology							L
Pharmacy							L
Diagnostic Imaging (excluding interventional radiology							L

WTH Patient Support Services: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Pathology							L
Pharmacy							L
Diagnostic Imaging (excluding interventional radiology							L

To be validated

Patient Support Services

The RDM refers to a grouping of 'Patient Support Services', comprising those which are important for patient safety. The RDM states that the entire category of services must be provided on-site in any facility ranked at or above level 4 to ensure timely turn-around. Patient support services comprise:

- Anaesthetic Services
- Operating Theatres
- Critical Care Services (ICU/HDU)
- Coronary Care Units
- Interventional Radiology* (This has been moved into the Surgical Services grouping)

As they are patient supports to the other services provided within a facility, it is appropriate that their level of complexity reflects the requirements of other services within the facility. For each of the sub-services above, the RDM specifies the level of each clinical support service required. The level of patient support service provided within a facility should, therefore, reflect the highest requirement across all other services provided within that facility.

The tables below assess the current state and future state – as defined in accordance with the future level of all other services – for clinical support services.

NSH Patient Support Services: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Anaesthetic Services							L
Operating Theatres							L
Critical Care Services (ICU/HDU)							L
Coronary Care Units.							L

WTH Patient Support Services: current and future ranking

Sub-service	1	2	3	4	5	6	Change required
Anaesthetic Services							H
Operating Theatres							L
Critical Care Services (ICU/HDU)							H
Coronary Care Units							H

To be validated

Key changes, Patient Support Services

	NSH	WTH
Anaesthetics Services *The need to increase anaesthetics support at WTH was echoed across a number of Service Workshops and are needed to enable step change in Surgical services.*		
Current	Level 6	Level 1
Aspiration	Level 6	Level 3
Transition	-	• Supports intermediate surgery on medium risk patients and complex surgery on low risk patients • Specialist Anaesthetist on site during normal working hours and on-call roster after hours
Interdependent upgrades to other services/supports	-	• ICU Level 3 (from 2) • CCU to level 3 (from 2)
Critical Care Services (ICU/HDU) *The need to increase anaesthetics support at WTH was echoed across a number of Service Workshops and are needed to enable step change in Surgical services.*		
Current	Level 5	Level 2
Aspiration	Level 5	Level 3
Transition	-	• Identified facility in the hospital is designated as either a HDU and/or ICU with clear admission and discharge policy • Provides mechanical ventilation and simple invasive cardiovascular monitoring and ionotrpic support for less than 24 hours • SMO with interest in intensive care rostered in normal hours Or • SMO cover for individual patients by other rostered specialty
Interdependent upgrades to other services/supports	-	• Anaesthetics Level 3 (from 2)
Coronary Care Units *The need to increase anaesthetics support at WTH was echoed across a number of Service Workshops and are needed to enable step change in Surgical services.*		
Current	Level 5	Level 2
Aspiration	Level 5	Level 3
Transition	-	• Provides ionotropic support • Designated coronary care area • Specialist cardiologist on site during normal working hours.
Interdependent upgrades to other services/supports	-	• Anaesthetics Level 3 (from 2) • ICU/HDU Level 3 (from 2)

To be validated

Appendix 4: Divisional workshop summaries

Child, Women and Family Division

Identified service challenge	Potential service response	Time Frame
Models of Care		
The two sites currently have different models of paediatric ED. WTH has the preferred model – operating more cubicles with a greater level of trained staff on duty	• Potential to improve the staffing and capacity of NSH paediatric ED (e.g. increase SMO Paediatric support staff on site)	Immediate - Medium Term
Low level of acute support at Waitakere (confirmed across Paediatrics, Gynaecology and Obstetrics) – particularly having only one Anaesthetic SMO on call after hours and no HDU like facility for very unwell patients or adverse surgical events	• Higher acuity support function or robust transit system will need to be considered, particularly as volumes grow	Medium Term
Paediatrics have one of the more developed community based services in the Provider arm, with a clear structure featuring multidisciplinary teams organised around geographic clusters, significant community outreach programmes, and a single point referral system recently implemented. However connectedness with other key services in the community remains a challenge, as does meeting demand and providing appropriate holistic models of care	• Improve interconnectivity between services looking after the same patients and families in the community – particularly through improved communication technologies – to support the move towards multidisciplinary models of care • Consider how to further leverage the Paediatric model and extend to other provider based services needing more interconnectedness and presence within the community • Consider fostering closer physical alignment and co-location with related services at WTH, namely inpatient services and Mental Health	Medium Term
The service has difficulty planning for birthing volumes as women in the region can choose their birthing centre, and a significant portion are known to choose ADHB facilities	• Working with ADHB on gaining better visibility and fostering better education on birthing options by locality	Immediate Term
Patient awareness of Paediatric care options in the region is variable and influences the nature of presentations at both hospital sites (e.g. knowing there is no inpatient presence at North Shore and when to go to Starship Hospital)	• Work with other regional providers (DHBs and other community partners) to foster better understanding of what services and level of care is available in the region	Immediate Term
A portion of high risk pregnancies, particularly in the West, are still presenting without early pregnancy assessments or care	• Connecting GPs and Early Pregnancy to provide better care to high risk women	Immediate Term
Improvement in key model of care pathways for patient cohorts that currently span multiple aspects of CWF services and multiple services outside of CWF	• Clear referral pathway with the Mental Health service for Obstetrics and Paediatrics • Pathway and clear model of care for high and complex need cohort for Paediatrics	Medium Term
Growth in availability and demand for minimally invasive procedures	• Minimum invasive gynaecology work being currently being put forward to Business	Immediate Term

Identified service challenge	Potential service response	Time Frame
predicted	Case • Potential to expand service offering	
Urogyneacology and Endogyneacology predicted as key growth areas	• Potential for subspecialisation for these when appropriate by volume	Longer Term
Facilities & Assets		
Development of Waitakere Hospital into a holistic Women and Children's Secondary Hospital: • The split in CWF means that all acute gynaecological procedures must be sent to North Shore • Service reports growing issue with lack of higher acuity support at Waitakere, predicted only to become more difficult as volumes increase	• Potential for consideration of whether acute surgical presence should be offered at WTH (including acute Gynaecology) • Potential for HDU facility at WTH	Longer Term
Whānau model of care: facilities do not allow families to stay overnight with children in the Rangitara ward and mothers with neonates. Patient choice and culturally appropriate care is not able to be delivered	• Literature indicates outcome improvements from family centric models. Future developments in the Rangitara ward and SCBU facilities are planned to have adequate space to allow families to stay.	Medium Term
No short-stay/observation facility for paediatric cases – majority stay longer than 6 hours in ED or are admitted to the ward overnight from lack of alternative options. Up to a third of recently reviewed admissions by the service stayed less than 24 hours after being admitted	• Potential for development of a short stay facility at Waitakere to allow further reduction of length of stay and prevent admissions	Immediate - Medium Term
Service highlighted that an inpatient unit is not currently indicated as required at NSH (to be reviewed), a number of patients transferred to Waitakere are discharged within 24 hours of being assessed by an SMO	• Review of NSH inpatient paediatric feasibility in the next 2-3 years	Immediate Term
The number of community based facilities has the potential to fall short of demand for service provision in these settings into the future. The growth in demand will be in part driven by factors such as ageing and chronicity, the need to substitute to more affordable forms of care, and patient preference to be treated closer to home The CWF service is also aware of the strong link between inpatient births and Caesarean rates, which are trending towards 40% by 2025	• Potential development community outreach, urban clinics, more community rather than hospital based • The service is proposing two more community based birthing centres, one at NSH and one at WTH. This work is being done in conjunction with ADHB	Immediate - Medium Term
Birth rates are highest in the West. With birthing rates nearly double in the West compared to the North, and growth in the 0-14 bracket 15% in the West compared to 8% in the North, obstetrics and neonatal care will be a growth area in the West for CWF to consider moving forward	• Inpatient growth from WDHB's recent bed model predicts another 16 overnight beds required for the Obstetrics service of the next 10 years. The current SCBU levels are considered appropriate, but future growth in demand may require the current even split between the two sites to be reviewed and development directed towards the west	Longer Term

Identified service challenge	Potential service response	Time Frame
Early Pregnancy Assessment Unit at Waitakere	• Potential for early pregnancy service (akin to ADHB unit which is nurse led) to meet growing demand in West and offer better support to GPs	Immediate - Medium Term
Wilson Centre noted as an older facility that features an outdated Model of Care with patients live at home and come in for periods of planned care	• Potential for refurbishment • Potential for new, more community based model partnering with an NGO for accommodation while the DHB provides appropriate nursing, allied health, and clinical oversight	Immediate Term
At Waitakere Hospital there is a low level of investment into Paediatric subspecialties such as Paediatric General Surgery, Paediatric Cardiology & Cardiac Surgery, Paediatric Neurology & Neurosurgery, Paediatric ENT / ORL (Otorhinolaryngology), and Paediatric Orthopaedics. In the future there may be a need to bring these services up to a level 3 in the RDM to provide quality care to patients. However, this requires conversations to be held in order to determine the best outcomes.	***See Section 3: Potential Services Development and Appendix 3*** **Waitakere:** Investigate the movement towards a 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 Paediatric General Surgery, Paediatric Cardiology & Cardiac Surgery, Paediatric Neurology & Neurosurgery, Paediatric ENT / ORL (Otorhinolaryngology), and Paediatric Orthopaedics (with the focus on collaborating with Starship on appropriate care given WDHB's size and catchment) . **The key changes to be investigated are:** • **Patient characteristics and key procedures / treatments** ▪ Minor and intermediate complexity elective surgical procedures on low risk children over the age of 1 year for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics ▪ Except in emergencies, children under the age of one year are not admitted for Paediatric General Surgery, Paediatric ENT / ORL, Paediatric Orthopaedics • **Hours of access** ▪ Medical officer rostered on site 24 hours ▪ Surgery performed by General Surgeons. May be a visiting specialist paediatric surgical service ▪ Specialist Cardiologist with a Paediatric interest available in normal business hours. May be visiting ▪ Surgery performed by ENT/ORL surgeon. May be a visiting specialist paediatric service Medical officer or RMO rostered on site 24 hours ▪ Surgery performed by Orthopaedic Surgeon. May be a visiting specialist paediatric service • **Outpatient** ▪ Provides a neurology outpatient consultation service by a neurologist. May be visiting • **Inter-speciality relationships** • The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2)	Medium - Longer Term

Identified service challenge	Potential service response	Time Frame
Information technology		
CWF have a number of patients and families who access multiple services, heavy linkages with other services such as Mental Health, and a large workforce who operate out in the community or at clinics. At the moment the lack of system interoperability and linkages affects both productivity and the ability of the service to offer a holistic care model to patients	• iPads for community based teams are being piloted at the moment and have shown improvements in productivity and access. These are envisaged to be rolled out further across the services but require additional investment particularly for the community and ambulatory teams • Further investment in hospital, community, and primary care system connectivity	Immediate Term
Workforce		
Paediatrics junior doctors, benchmarking across the region indicates a relatively low proportion of registrars in Paediatrics compared to volumes	• There is a requirement to increase the level of registrars compared with volumes. In addition to an increase in junior doctors, there is a push to role substitute and skill mix change towards clinical nurse specialists and nurse practitioners to meet growing demand and facilitate outpatient offerings	Immediate Term
Shortages in ultrasound technicians within the public system are affecting timeliness of ultrasound provision for Obstetrics and Gynaecology	• A resolution to be considered as part of the broader Radiography shortages in the public system being experienced throughout the region	Immediate Term
For Paediatrics and Gynaecology, there was significant emphasis on role substitution and skill mix changes moving forward to meet growing demand and facilitate outpatient offerings	• Explore options to have more nurse led clinics, foster nursing staff working to the full scope of practice, and work with GPs to take on over appropriate procedures to bring volumes from hospital care to a community setting	Medium Term

Surgical and Ambulatory Services Division

Identified service challenge	Potential service response	Time Frame
Models of care		
More specialisation challenges service to plan surgical programme for future considering attracting and retaining high performing workforce and maintain best clinical outcomes for specialised surgical procedures.	• Regional services or enhanced collaboration to be considered. Examples provided by the services included: o Certain orthopaedic procedures done in one location within the Auckland region o Regional dietitian service for obese patients who need to be 'prepared' before being accepted for surgery o Review growth and service provision closer to home for specialties with large volumes – for example plastics, vascular	Medium Term
Aging of population, increase co-morbidities including obesity and improved screening / diagnostic testing will lead to increased demand to expand existing surgical services. Some examples being: • Increase in patient volumes for patients with cancer and fragility fractures (correlated with aging) • Advanced screening e.g. bowel may lead to more surgical interventions) • Increase in obesity rates will lead to more complex support requirements	• The service as identified the following potential impacts: o Increase in volumes (e.g. bariatric surgery) o Increase in surgical support services (e.g. Pathology, Anaesthetics, Radiology) o Need for expanded services: ▪ Extending service beyond NSH to other facilities (e.g. Pain services to WTH & ESC, and Hand and Skin services at WTH) ▪ Providing more 'rigour' in certain services (e.g. more efficient pulmonary exercise testing for pre-anaesthetic clinics; pain clinic expanded to include multi-disciplinary teams) ▪ Increased 'numbers' of FTEs (e.g. ortho-geriatrician/geriatric, ICU SMO cover) ▪ Increase 24/7 day coverage (e.g. Advanced IR to support General Surgery, Palliative Care, Maori Health)	Medium Term
Population growth will also provide opportunities to deliver more services locally if these are more convenient for WDHB's patients and can be delivered in a cost efficient way	• Participate in regional and national forums to determine who delivers services with best clinical outcomes and cost effective service deliver • Consider provision of tertiary services o breast reconstruction o Plastics o Vascular • Review regional outs of hours services	Longer Term
Service is challenged with ability and need to maintain and complete follow up appointments and this provides the opportunity to look at alternative ways of managing volumes	Investigate use of: • Virtual clinics • GP follow-ups • Nurse led clinics	Immediate Term

Identified service challenge	Potential service response	Time Frame
	This will require the development of standardised care pathways	
Surgical services currently handle an array of case complexity across lists, making it difficult to operate effectively or concentrate specialities	• Devolution of more routine procedures to Primary Care settings performed by GPs with a Special Interest (e.g. skin, low risk procedures) This will require the development of standardised care pathways	Immediate - Medium Term
Health inequities continue and Maori/Pacific Peoples continue to have poorer outcomes across surgical services. This is in part driven by a lower level of health literacy within these populations	• Seek to improve health literacy for Maori and Pacific Peoples in culturally appropriate formats (e.g. DNA rates continue to be an issue) • Attendance for screening programmes and clinics is a key area to target with such an education campaign	Immediate Term
Operating room improvement opportunities exist to better utilise resourced capacity. (e.g. use of procedure room within surgical ADU)	• Surgical services see ongoing opportunities to improve efficiencies including: o Reducing cancellations; turnaround between cases; wait time to OR for acutes; full day lists; separation of day surgery and inpatient stay lists • Services generally sees acutes that is capable of being planned and more predictable than currently managed • Managing surgical flow of acute patients / timely access to treatment and avoidance of inpatient admissions in surgical ADU • Increased use of procedure rooms for day case surgery	Immediate Term
Cancer Services in the future will likely rise	Investigate further development of: • An Ambulatory Centre providing MDT , co-ordination of care, diagnostic investigations as well as consultation “one stop shop for patients” • Increased surgical services • Plan to bring oncology services closer to home for patients will require development of medical oncology service s and identification of what services are provided locally • Faster Cancer Treatment Times • Quality patient experience	Medium - Longer Term
Key patient pathways are still absent, not well understood or adhered to in all cases	• Investigate key patient pathways and develop improved pathways for the key patient cohorts	Medium Term
Review and explore provision of care across the provider with a view to restructure cluster of services to provide continuous care to meet patient needs	• Utilise the already undertaken Bohmer work with a view of restructuring the clusters of services to provide continuous care and meet patient needs	Longer Term
Advancements in surgical services and particularly interventional radiology will have a large impact on surgical pathology	• Include surgical pathology requirements in any service development plans, as the growth in IR like services will have a direct impact on demand for sample testing	Medium - Longer Term
Increasing "multiples" sampling requirements reported by surgical pathology, and likely to continue increasing going forward	• Review case mix and resourcing, with greater number of cases with multiple samples coming through creating higher complex and labour requirements (e.g. mastectomy used to come with two samples and now comes in 5-8 samples)	Immediate - Medium Term

Identified service challenge	Potential service response	Time Frame
Limited understanding of patient pathway or rationale for ordered tests for support services at the moment; services reported a number of 'failure demand' instances of over and under testing compared to clinical indicators	• Laboratory, Pharmacy, and Surgical Pathology envision being much more embedded in patent pathway, and shifting away from a 'factory' model • Similar to Radiology, technology enabled referral management checks and leveraging MDM teams to review clinical base for requests would improve quality of care and rationalise volume of tests requested	Immediate - Medium Term
There has been an increase in demand for Hospital Operation services based on growing population pushing capacity of hospitals, aging population with comorbidities and the public's expectation of hospital services providing proactive care. Haematology, Surgical Pathology, Labs, and Pharm have all grown very little over the last 5 years compared to growth in demand for services	• Set up milestones for which to increase the size of clinical support services so that there are not undue delays and decreases in quality • Consider appropriate ratios against clinical FTE sizing or patient volumes	Immediate - Medium Term
Ageing population and prevalence of cancers predicted as the biggest demand growth area for surgical pathology	• Ageing population and greater life expectancy results in greater incidence of cancer, creating demand pressures for the service in the future. Cancer currently accounts for 60% of volumes for surgical pathology	Medium - Longer Term
Demand for screening programmes • Bowel Screening and Non urgent colonoscopy • Breast Screening	Increase the supply of screening programmes through finding more efficient pathways or creating addition beds and resources • Bowel Screening and Non urgent colonoscopy • Breast Screening	
Facilities & Assets		
Some surgical services facilities are not 'fit for purpose' in terms of delivering a patient experience that is conducive to enhanced recovery and wellness (e.g. separation of paediatric and adult orthopaedics). Also with future growth, there may be a need for more dedicated OR and bed spaces	• Facilities review of 'fit for purpose' is already underway • OR, Ward and Outpatient needs being considered as part of the Master Site Planning process	Immediate Term
Space constraints within Laboratory, Pharmacy, and Surgical pathology limit the ability to keep up with best practice technology and practice	• Include these services in refurbishment and future facilities development to ensure adequate room and future proofing exists within facilities	Medium - Longer Term
Clarity on what types of surgical procedures would be performed at Waitakere Hospital as the population grows	• The service is open to exploring delivery of elective surgical services at WTH. This could involve WTH being a dedicated site for specific procedures (e.g. Colorectal, Hand surgery and Skin service • There is a need to understand the economics and commercial feasibility of duplicating surgical services, compared to splitting acute, elective and day cases across the 3 main operating room sites (ESC, NSH and WTH). This needs to be weighed against what is best for the patient and community, including convenience and quality	Medium - Longer Term

Identified service challenge	Potential service response	Time Frame
	• The WTH infrastructure would need to be reviewed in relation to out of hours surgical cover, HDU etc	
Review plan to develop Waitakere Hospital to full level 4 hospital	• Investigate what role WTH will play in WDHB and investigate the feasibility of moving WTH to a level 4 hospital	Medium - Longer Term
Development of IR service to support growing surgical and medical services	• Investigate the further development of the IR service	Medium Term
Population growth and aging will lead to more volume growth for surgical services and development of shared care across specialties focuses on the patient	More 'specialised' WDHB facilities and services may be required as volumes increase, such as: • Ortho-geriatrics may need own post-operative care area • Area in wards to look after post HDU patients (High observation area) • Procedure rooms in surgical ADU for simple procedures • More focused surgical services (e.g. neck of femur performed by orthopaedic surgeon as a referral by geriatrician who looks after rehab and other illnesses of elderly) • Specific procedure lists (e.g. carpel tunnel lists; shoulders lists, hips lists, knees lists)	Medium Term
Underutilisation of the ESC and role of this facility as part of the WDHB network of sites	• The services are generally committed to improving the utilisation of the ESC • Suggestions to consider include o ORL & Plastics to be added o Regional service provider for Orthopaedic (i.e. Centre of Excellence) o Co-ordination of endoscopy services in fit for purpose facility, working with medicine to develop model of care • Management of lists and scheduling	Immediate Term
At both North Shore Hospital and Waitakere hospital there is the potential to increase the service provided for surgical services. For North Shore in particular there are a variety of services that are currently below a level 4 on the RDM being ENT / ORL, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Plastic Surgery (incl. Burns), Urology, and Vascular Surgery. For Waitakere General Surgery, Cardiothoracic, ENT / ORL, Gynaecology, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Orthopaedics, Plastic Surgery (incl. Burns), Urology, and Vascular Surgery are all below a level 3. In the future some of these services may be a need to be developed in order to provide quality care to patients. However, this requires conversations to be held in order to determine the best outcomes.	***See Section 3: Potential Services Development and Appendix 3*** **North Shore:** Investigate development of surgical services at North Shore to a 'high volume and medium patient complexity level', which translates under the RDM to level 4 ENT / ORL, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Plastic Surgery (incl. Burns), Urology, Vascular Surgery. The key changes associated with this are: • **Patient characteristics and key procedures / treatments** ▪ Minor and intermediate procedures on low or medium risk patients for neurosurgery and plastics ▪ Up to complex surgical procedures on medium risk patients for ENT / ORL, Ophthalmology, Urology, and Vascular ▪ Complex diagnostic and treatment procedures on all risk patients including an acute aortic aneurism service • **Hours of access** ▪ Normal working hours for Specialist plastic surgeons available normal working	Medium - Longer Term

Identified service challenge	Potential service response	Time Frame
	hours ▪ Neurosurgeon available for emergency consultations during normal working hours ▪ On call and after hours provision for ENT / ORL, Ophthalmology, Urology, Plastics, and Vascular ▪ Emergency and specialist oral health care for inpatients • **Outpatient** ▪ Outpatient consultations by a neurosurgeon during normal working hours • **Inter-speciality relationships** ▪ Facilities for general anaesthesia for day surgery or longer admission ▪ All other support services are met in the RDM, but it was noted in workshops that all major support services are near capacity. Growth in services would likely push these past the tipping point and require further resource and facilities **Waitakere:** Development of surgical services to 'Specialist services providing acute and elective care to communities', which translates under the RDM to level 3 General Surgery, Cardiothoracic, ENT / ORL, Gynaecology, Neurosurgery, Ophthalmology, Oral Health & Maxillo, Orthopaedics, Plastic Surgery (incl. Burns), Urology, Vascular Surgery: • **Patient characteristics and key procedures / treatments** ▪ Up to intermediate ENT/ORL surgical procedures on low or medium risk patients. Excluding neuro-otic or intracranial surgery ▪ Up to intermediate surgery on medium risk patients and some complex surgery on low risk patients for General Surgery ▪ Intermediate procedures on low or medium risk patients and complex procedures on low risk patients for Gynaecology, Ophthalmology, and Urology • **Hours of access** ▪ General surgeon rostered on site normal working hours and rostered on-call after hours ▪ Medical Officer or RMO rostered on site 24 hours ▪ ENT/ORL surgeon available normal working hours. May be part of a regional service ▪ Specialist Gynaecologists rostered in normal working hours with rostered on-call for after hours ▪ Specialist care provided by dentists with specialist experience or by dental specialists during normal working hours ▪ Urologist available normal working hours. May be part of a regional service • **Outpatient** ▪ Outpatient consultations by plastic surgeon during normal working hours. May	

Identified service challenge	Potential service response	Time Frame
	be visiting • **Inter-speciality relationships** • The following services developed: Anaesthetics level 3 (from 2), ICU/HDU Level 3 (from 2), CCU to level 3 (from 2)	
Information technology		
Lack of ability to move easily between different settings	• Technology that links primary to secondary care providers • Remote monitoring and dedicated time to see these patients • Remote consultations for rural population (i.e. through telehealth)	Longer Term
Advancements in pathology technology	• Pathology is a manual service requiring human assessment and this is unlikely to change from the services perspective going forward, however some efficiencies can be gained from investment in technologies such as digital slide scanners, more integrated EHR, voice recognition and automatic microtome machines	Medium - Longer Term
Workforce		
Inability to serve growing demand with traditional ways of working	• Rise of other specialists staff who can perform work previously completed by medical profession (e.g. nurse practitioners, nurse led clinics, and care coordinators)	Longer Term
Changing workforce profiles create challenges in meeting future service demands	Service is seeking to look at: • Workforce aging and ability to resource night shifts; need more flexible pathways for peoples' careers • Senior skill mix, does this need to change – anaesthetic / ICU • Ability to train junior RMOs at efficient costs • Technician workforce not readily avail (e.g. anaesthetic techs) • Training in the future – more simulation type courses • Increase in Nurse Practitioners (with possible Endoscopists) • CNS workforce for nurse led clinics and out of hours support	Medium Term

Medicine and Health of Older People Division

Identified service challenge	Potential service response	Time Frame
Models of care		
Rehabilitation services are impacted by a lack of growth in both rehabilitation beds and alternative rehabilitation programmes based in patient's homes or local community. This challenge is reflected in the LOS on acute medical wards (on a waiting list) and/or LOS in AT&R ward. high growth in related conditions over the same period (e.g. 23% growth in hip replacements) has not been matched by a corresponding development of rehabilitation beds and other options	• Development of an early discharge and rehabilitation service – initially focused on stroke patients • Develop a proposed model of care for a Transitional Unit based in the community to support lower acuity rehabilitation patients • Redesign the current AT&R wards on the North Shore site which are not fit for purpose (Medical Tower)	Immediate Term
Continue to standardise care through the development, implementation and effective evaluation of clinical pathways – initial focus is the hospital, however over time this should include other care providers, i.e. GP's, St Johns etc	• Agree a standard approach/methodology for pathway development, implementation and evaluation • Ensure there are electronic systems to capture and report against the pathways (variance reporting/outcome reporting) • Identify high volume patient cohorts across all services and prioritise for pathway development – this should include diagnostic pathways, i.e. Radiology (patient disease approach) • Develop the appropriate workforce to provide care in line with the pathways, i.e. CNS, NP initiated • Ensure the right environment is available to support the pathway (options rather than inpatient beds, i.e. day stay type setting – chairs rather than beds/ longer term community options)	Immediate - Medium Term

A number of medical patient cohorts were identified as highly comorbid, long stayers (e.g. older, highly comorbid patients consume around 45% of medical and surgical beddays)	• Stroke (Richard Bohmer)– develop patient pathway from presenting to ED to returning to home, this will include regional service for 'clot retrieval', integrated inpatient unit (Medical Tower) from hyper acute care to rehabilitation
	  ◦ Link the stroke patient pathway to the early discharge and rehabilitation service proposal (role of Wainamu – West in the management of stroke patients)
	  ◦ Development of the workforce to manage stroke patients – Medical, Nursing and AH model
	• Continue to contribute to regional stroke forum – focus on community education wider brief than provider arm
	• Frail Elderly (Richard Bohmer) – Bring the MDT team with Geriatrician input to the 'front door' (ED/ADU) to develop a care plan for the agreed frail elderly cohort. This would ideally include family and may require NASC input
		Immediate - Medium Term

Identified service challenge	Potential service response	Time Frame
	• Explore how best to support the patient in the acute general medical wards – nursing, allied health and medical team • Continue to develop the relationship between the GNS and ARRC facilities through the RACIP program to support complex patients in ARRC and to continue to prevent avoidable admissions to hospital • Provide timely and high intensity home based support packages to a clearly identified patient group on discharge to enable them to regain functionality post an acute admission (up to 6 weeks) • CARE Project • A multi-disciplinary, front door (ED or ADU based) rapid response team to efficiently diagnose and treat incoming secondary patients as outlined in the Medical Blueprint. This should also be extended to include other key specialties and clinical support services which has not yet occurred (i.e. radiology, orthopaedics). • Bohmer streams should be further leveraged to consider orthogeriatrics, diabetes, dementia, stroke cohorts	
Contingency plans need to be formulated and resourced in case there are delays in supplies or if unprecedented demand occurs	• Develop emergency planning for a supply shortage or large infection outbreak (e.g. Ebola) which is becoming more common as resistant organisms evolve	Medium Term
Medical care is fragmented with individual general medicine teams having patients on many wards, resulting in challenges for both timeliness of care and communication with nursing and allied health staff and inefficient use of the medical teams time	• WDHB General Medicine Service will use a "home-based" ward system featuring an interdisciplinary team working in parallel with allied health staff, nursing, linked to community services as outlined in the Medical Blueprint. • Medicine will also develop further sub speciality beds for complex respiratory and gastroenterology patients over time on the North Shore site • A strong sub specialty consult focus will continue to be developed at Waitakere Hospital to support the general medicine patients (this includes visiting services such as oncology)	Medium Term
There is uncertainty as to where Infection Control and Prevention sits within the organisation. This leads to the 'not in my backyard' mentality and it is often ignored.	• Investigate and formalise where infection control fits within WDHB	Immediate - Medium Term
Community involvement will increase over the next 10 years as infection control covers all patients across the continuum of care (including family, workforce who are in contact at hospitals). Movement to primary care will involve education and common guidelines for infection control and prevention	• Investigate what the movement to primary care will involve education and common guidelines for infection control and prevention	Medium - Longer Term
Older People Health and Mental Health of Older People services are challenged to provide appropriate levels of care and supervision to patients within their clinical scope spread across the hospitals	• Consideration needs to be given to appropriate model embedded medical and surgical multidisciplinary teams, as well as at the Front Door in the ED and ADU • Implement the ADU medical model	Medium Term

Identified service challenge	Potential service response	Time Frame
Lack of a dedicated medical ADU and day stay facility on the North Shore site (excluding haematology day stay) – medicine require an appropriate model of care to assess patients in a timely manner across extended hours to both avoid unnecessary admissions but primarily to provide a timely diagnosis and treatment for patients who can then return home.	• Reconfigure the ADU to manage 'day stay' type patients, provide timely acute assessment, appropriate staff to support this activity timely access to support services and an appropriate environment	
Maori and Pacific populations will see growth in relative geriatric volumes in 10 years (1% growth in both)	• Consideration needs to be given to further enhancing Maori & Pacific support services for geriatric care. Not dedicated team currently exists	Medium Term
Minor procedures and diagnostics that do not require follow ups in secondary settings are still being seen in large volumes by Medical Specialists and through Emergency Departments	• Devolution of more routine procedures to Primary Care settings performed by GPSIs – for example 20% of all Cardiology volumes were classed as "without catastrophic or severe" presentation within the inpatient database	Immediate - Medium Term
Outpatient management, referral and triaging had areas of inefficiencies highlighted by the services (e.g. Cardiology, which estimates that it currently takes 6 weeks for GP referrals and 2 weeks for follow up, ED highlighted lack of remote triaging & consults, chronic Diabetes and Respiratory treatments at different times and locations)	• Improve the process for assessing acutely presenting patients, with a one-stop shop model and closer alignment to primary services likely to offer substantial gains (see ADU service response above) • More opportunities for remote triaging and consults as technology improves. This has large implications from post-care after discharge from ED and ADU (e.g. wound care reminders) which could reduce readmission or reliance on other services	Immediate Term
Trend towards higher availability of procedures in older age groups will drive demand going forward (particularly for Cardiology & Gastroenterology)	• The threshold for access should be reviewed and considered alongside demographic change when planning for facilities & workforce requirements	Medium - Longer Term
Challenge of managing and/or co-managing with the GP/primary care patients with long term chronic conditions Limited community and preventative care models for key inpatient Medical services (particularly Renal, Diabetes, Respiratory) means these services are currently sized to support inpatient presentations but not to proactively manage the full spectrum of care for key patient cohorts (i.e. COPD, Diabetes type 2)	• An integrated shared health record for chronic patients would enable all the care providers and the patient to have a single repository for their clinical information • Investigate the navigator role for those patients with multiple and complete long term conditions • Coordinate secondary care for this group of patients (i.e. multiple outpatient appointments) – risk stratify patients for higher input • Investigate the use of tele health/support apps for chronic patients • Renal, Diabetes, and Respiratory role within community and primary services to be reviewed along with staffing requirements	Immediate - Medium Term
Facilities & Assets		
Waitakere Hospital currently provides a more limited service than North Shore Hospital. However the volume of patients presenting to ED (with high volumes of paediatric presentations) is increasing and subsequent are the general medicine admissions. Future planning around how best	Services identified the following responses: • Increasing medical staffing for General Medicine will enable more patients to remain at WTH in the future. However consideration needs to be given to an HDU for both Medicine and Women's Health (no surgical inpatients currently). Consideration for an	Immediate - Medium Term

Identified service challenge	Potential service response	Time Frame
to utilise Waitakere should focus on confirming the role of this site for the MHOP Division, this will include: ADU function, outpatients, day stay, acute inpatients, and endoscopy	HDU at Waitakere is put forward in Section 3 of this HSP • The ADU component of the ADCU at WTH will need to expand over time (as noted above for North Shore) • Extending support services (e.g. Radiology, Anaethaesetics cover) would be required to safely increase the clinical acuity of the inpatients at Waitakere Hospital	
Significant growth projected for acute and overnight medical services over the next 10 years,	• Inpatient bed numbers for Medicine are forecasted to grow by 158 in the next 10 years. An additional Medical Tower could cater for this predicted growth • Services suggested dedicated beds for high volume medical services (e.g. gastroenterology), and associated need for sufficient specialised nurses and RMO resources	Longer Term
Medicine and in particular those specialties supporting patients with long term conditions will continue to provide clinics across both the main sites, however working in the community and in partnership with GP's/primary care is an important component in caring for this group of patients. Engagement of patients with long term conditions is crucial and for Maori working within a Whānau Ora model is an important enabler for engagement of patients and their Whānau Ambulatory patient cases are currently disjointed across multiple clinics and sometimes occupying hospital beds unnecessarily	• The Senior Management Team and broader executive have identified an ambulatory centre as an important enabler for better segmentation of care and model of care improvements for ambulatory cases and outpatient clinics • Patient focused booking • Coordination of multiple appointments • Services provided in community and/or co-located with GP's/primary care • Use of telehealth	Longer Term
Similar to Surgery supporting services, Gastroenterology noted better interfacing and collaboration could occur for its major referral sources	• Future models of care should be developed that consider role of gastroenterology and endoscopy particularly as diagnostic versus therapeutic, and where it best fits in the patient care continuum	Medium Term
General facilities at NSH are not adequate for infection control and prevention. Future facilitates development should be designed with infection control requirements in mind.	• Investigate how future facilities should be designed to enable infection control	Medium - Longer Term
Some medical facilities are not 'fit for purpose' in terms of optimising procedures or delivering a patient experience, notably gastroenterology procedure rooms	• Facilities review of 'fit for purpose' is already underway	Immediate Term
At North Shore Hospital conversations have been had around whether to increase the level of support provided in General Medicine. This would require a shift in the RDM from a level 4 up to a level 5. This would require a large amount of development in other services. Additionally, for Waitakere Hospital there are some medical services which are below a level 3 on the RDM being, Immunology, Emergency Medicine, Medical Oncology, and Clinical Haematology. In the future	***See Section 3: Potential Services Development and Appendix 3*** **North Shore:** Investigate movement towards a RDM 'level 5' General Medicine service due to extensive predicted growth in General Medicine services and in Health of Older adults in particular. This requires investigation on the following key step changes • Development of key Medical specialties rosters, clinical scope, and access, potentially including Palliative Care, Renal , Respiratory, Cardiology and	Medium - Longer Term

Identified service challenge	Potential service response	Time Frame
some of these services may be a need to be developed in order to provide quality care to patients. However, this requires conversations to be held in order to determine the best outcomes.	Cardiothoracic • Development of Specialist Rehabilitation towards level 4, including Designated inpatient rehabilitation unit, Specialist Medical Officer with training in rehabilitation medicine responsible for patient care available normal business hours, and dedicated inter-disciplinary teams with specific expertise in dedicated rehabilitation programs. May be orthopaedic, neurological etc. • Access to a level 5 medical and radiation oncology service for Cardiothoracic due to the requirements needed to support a level 5 General Medicine service **Waitakere:** Investigate movement towards a RDM 'level 3' for WTH medicine **(see Potential Services development in Section 3)**, including: • Immunology • Emergency Medicine • Medical Oncology • Clinical Haematology	
Information technology		
A large portion of medicine outpatient services involve monitoring of pre-existing conditions to change treatment or intervene to admit a patient for secondary care	• Remote monitoring and telehealth systems could reduce the need for a physical appointment, improving capacity on site and more accurately direct patients to specialty care when required. Beyond enabling technology, important aspects to consider to make this work are appropriate assignment and tracking of SMO time, as well as sufficient resourcing or competency in community / primary care settings	Immediate Term
All medical services noted a lack of system interoperability and linkages affects both productivity and the ability of the service to offer a holistic care model to patients	• E-referrals and electronic triage has so far made an impact and are planned to roll out further, but further investment and intensification required (e.g. formal Electronic Health Record system)	Longer Term
Workforce		
Identified shortages of SMOs and RMOs have been identified, particularly for General medicine and Gastroenterology where admissions and procedures have grown hugely over the last 5 years but staffing largely kept the same. Ratios suggest Waitemata current staffing per population is below levels recommended by IMSANZ / RACP	• Additional resourcing has been proposed for Waitakere General Medicine • A new roster that better matches numbers to acuity and volumes after hours • Medical Blueprint proposes having SMOs in-house until 8pm • Increase the overnight staffing at both hospitals by House Officers and Registrars • Resource mix review for two EDs • Review resourcing for high volume subspecialties such as Gastroenterology	Immediate - Medium Term
ADU & Medicine after-hours admitting is insufficiently resourced. Analysis of presentation times for assessment by General Medicine for patients referred from the community, or from the ED, shows a peak at approximately 3 pm. Volumes prior to midday are significantly lower. The peak extends to around 6pm before ebbing		

Identified service challenge	Potential service response	Time Frame
Waitemata is a leading NZ provider of vocational training for Medical services, particularly in General Medicine. Accreditation have risen steeply in terms of SMO time needed in the last 3 years, and training requirements in general must be balanced against growing demand	• Sufficient SMO time and FTE must be available to meet the educational requirements current accreditation status of the DHB. The suggested Medical Blueprint FTE changes would work to improve ratios to achieve this, but it should be considered across all Medical services as a training facility	Immediate Term
Allied Health is not currently funded to work weekends which increases LOS for a range of long staying patients	• Ongoing business case planning across the organisation to provide 24/7 in key services should also consider supporting services such as Allied Health	Immediate Term
Current workforce is not sufficient to support proactive management of infections which has led to a lack of strategy for potential breakouts	• Investigate how a workforce change could allow for the proactive management of infections	Medium Term
Inability to serve growing demand with traditional ways of working	• Rise of other specialists staff who can perform work previously completed by medical profession (e.g. nurse practitioner,; nurse led clinics, care coordinators)	Medium Term

Mental Health Division

Identified service challenge	Potential service response	Time Frame
Models of care		
Mental health services aspire to work more closely with primary care to shift secondary care to, enhance consultation and liaison activity in these settings, and supporting GPs to treat lower acuity patients, and to increase access to specialist consultation and advice	• Development of a GP education and support scheme to assist in treating Mental Health in a primary setting • Refine patient referral processes to shift Mental Health care from an outpatient to a community setting • Expansion and investment in 'Choice' model for Child & Youth service • Hub and Node approach envisioned to expand on Mason Clinic (as a hub), with increasing community presence in key geographic areas rather than expansion of inpatient facilities	Immediate - Medium Term
Changing services definitions and configuration: Child health is considering redefining their service scope by increasing the age of maximum age of patients from 19 to 25. There has been regional agreement about age thresholds for access to Older Adult Mental health Services, which will see increasing numbers of older adults cared for within Adult MHS	• This may have the impact of changing the distribution of volumes between services and increasing the need for collaborative models of care between adult and older adult services • Communication and planning between Child & Youth and Adult MHS to Section in the transition should the services be reconfigured	Medium Term
Interfacing between services and having clear care pathways for patients requiring Mental Health services, e.g.: • ED interface & referrals growing • Key CWF services such as Maternity for postnatal depression and Paediatrics for Child & Youth service volumes and links increasing • Increasingly asked to weigh in on things such as renal transplants, suitable donors	• Identify key services where MH overlap with medical and surgical services in a hospital setting • Discuss options for integration of MH support with identified services (e.g. increase in co-location of consult liaisons at hospital sites and wards)	Immediate Term
Improving self-help pathways and resources	• Consideration should be given to further investment in self-help tools online or in mobile apps, particularly for Child & Youth Services and Community Alcohol and Drug Services	Immediate - Medium Term
There has been an increase in volume and complexity of patients due to population growth and aging population leading to: • Daily pressure on Adult Mental Health service to find beds currently, with patients waiting in ED and other referral areas sometimes for several days • The Mason Clinic also caters for 'High and Complex Needs' patients	• There is a strong history of close work with the NGO sector and it is expected this will develop further. This has particular relevance to ethnic populations (Maori, Pacific, and Asian) in the form of peer care models Co-design of patient pathways and step-down referrals with NGOs. This will consider the flow of patients throughout their treatment and potential relapse to more complex treatment • Discussions with NGOs to develop peer care models that cater for cultural requirements of ethnic populations	Medium Term

Identified service challenge	Potential service response	Time Frame
which sit outside of the core forensic offerings but have no suitable regional alternative	• Consideration of increased beds for Adult Mental Health	
Paediatric services across the DHB are siloed and holistic care for younger patients would improve health outcomes for this group. Child and Youth Mental Health often treat patients that are also part of medical and surgical pathways	• Discussions with CWF to determine how Child and Youth Mental Health services could work better together for patients accessing both services	Immediate Term
Outcomes based funding a likely possibility over the next 10 years	• Opportunity to prepare services for funding shift now and consider how different incentives and rewards would impact on Models of Care and provision of services	Medium Term
Integration with social services across all Mental Health services will become key over the next 10 years, (e.g. service estimates that 20% of people are remaining in beds for social or cultural reasons): • Justice and Housing for Adult Mental Health, Education for Child & Youth, and Justice and Police for Forensics and CADs all have tremendous influence on referral patterns and ability to work within communities	• Ongoing work should be continued to strengthen links and communication with these services	Immediate Term
A growing demand for Youth Forensic services will be seen in the next 10 years. WDHB does not currently offer forensic services for this age group and will impact the ability to provide care for this patient cohort	• Forensic services for Youth should be planned with consideration given to the regional and national provision of services • Co-design of a potential service should include Child and Youth Mental Health services	Medium Term
Health inequalities and growing diversity: • Maori and Pacific access, outcomes and cultural awareness are continued areas for improvement • No dedicated Asian service for Mental Health services, with this demographic growing and often presenting with higher severity, and the Child and Youth service forecasting 44% service utilisation for this service	• Adult Mental Health Service in a process of looking at 5 year plan with other Maori NGO groups, and similar with Pacific NGOs • Desire from service to engage with Iwi around community presence and availability of land / facilities • Consideration required for a dedicated Asian Mental Health service, or more enhanced support from the current central Asian Health Service	Medium Term
Facilities & Assets		
The Mason Clinic is near capacity and is not suitable to house maximum security prisoners due to current security features. Growth in the prison muster in the next 10 years is expected to exceed current capacity for forensic services	• Review of a 'hub and node' service configuration is underway for Forensics to plan for increased capacity and facilities location across the region • Upgrade of Mason Clinic security features should be planned to ensure the safety of patients and reduce disruption to service provision – this could be timed with the introduction of additional capacity as part of the 'hub and spoke' model • The Mason Clinic also caters for 'High and Complex Needs' patients which sit outside of the core forensic offerings. This contributes to the high occupancy of beds and may change in the next 10 years but will require a review of policy and revenue	Medium Term

Identified service challenge	Potential service response	Time Frame
There are currently a large number of beds in the regional forensic service. This will likely increase towards 2025 allowing the service to repatriate some beds. There will likely be a shortfall of 8 beds for forensic ID	The regional forensic service currently provides 107 beds in Auckland (plus an additional 5 currently provided by C&CDHB) = 113. This serves the core regional MH (101) and ID (12) forensic population. • An additional capacity of eight will be available in the 20/21 year =121 (when an additional 15 bed unit is commissioned, the 5 C&C beds are repatriated and interim beds are decommissioned). There is currently a shortfall of approximately 8 step down beds for forensic ID. Demand for core MH forensic beds is not anticipated to increase further during the period of the HSP (2015-2025)	Medium - Longer Term
Information technology		
Greater use of technology: Access and treatment pathways will include consideration of e-therapies and the use of other technologies to support self-care. Developing technologies in 'interventional psychiatry' (e.g. ECT and TMS) will be more available, based on general hospital sites in day-procedure settings	• Identify the role of e-therapies in providing mental health services (e.g. monitoring check-ins, targeting adults, forensic check ins from prison) • Discuss intervention methods with key hospital services that receive patients also presenting mental health symptoms	Medium Term
Workforce		
The demographics of the workforce are due to change in the next ten years. A proportion are due to retire that will need to be succeeded and young staff need to be trained and developed to build an experienced and skilled workforce equipped to meet increasingly complex needs	• Develop succession planning across services and incentives to attract and retain a graduate workforce • Attracting an ethnic workforce and educating staff on cultural treatment requirements for ethnic populations • Planning the future workforce based on a shift in the setting of care, technology requirements of the workforce and shifting mix of roles	Medium Term
The ethnic diversity of the workforce will also require management to ensure that staffing matches demand from ethnic groups and the service has capability to provide culturally specific care		
Skill mix changes will include increased expertise in consultation and liaison (rather than direct care) activity; increased availability of advanced/specialist skills (e.g. in provision of psychological therapies); enhanced 'specialist' roles for specific areas of clinical focus (e.g. infant mental health; cardiovascular/metabolic screening; eating disorders; high and complex needs; etc); consumer/ peer workforce; and more specific support for families as carers		Medium Term
Workforce gaps noted in Child and Youth (50 FTE short of benchmark for the population by original Blueprint funding), Infant Mental Health with no dedicated FTE, and in Adult with psychologists and specialist nurses	• Potential to increase workforce in key areas where patient outcomes and access are most adversely affected	Immediate Term

Hospital Operations Division

Identified service challenge	Potential service response	Time Frame
Models of care		
Hospital Operations services are often reactively brought in to planning and development conversations, limiting the services ability to provide value-add insights or anticipate issues	• Investigate refining business case, model of care, and infrastructure guidelines to include requirements around engaging with key support services Include support service representation on multi-disciplinary planning committees	Immediate - Medium Term
Shift towards a model of 24/7 delivery of clinical support services (I.e. Food). Future patients will expect convenience from key support services and will want to access it at any time. The future provision of food services is predicted by services to be more towards a grazing style (hotel rather than a hospital)	• Identify the role of 24/7 food provision and how it can be used in the future • Determine the feasibility of moving to a 24/7 and more flexible model of delivering food services • Extended pharmacy and phlebotomy hours, with 10 pm minimum suggested by Services, but need to consider impact	Immediate - Medium Term
The continued growth internationally in personalised medicine & epigenetics will most directly impact Laboratory and Pharmacy services, and will continue to change best practice and the way Laboratory and Pharmacy Services need to be configured	• Service needs to consider and development plan to bring these best practice developments to WDHB patients, and identified these major focus areas: o Genetic tests may mean less reliance on chemo and cancer drugs and more on microbial antibodies, and genetic targeted therapies o Growth of Multi-Resistant Organism and new antibiotics o Growth in microbiology services and screening, which is very labour intensive currently. Investigation of automation is key for this process in the future o Growth in chemotherapy agents (currently outsourced to igenes in large measure) o New innovation and tests will become available that WDHB will need to invest in facilities and equipment to deliver best practice	Medium - Longer Term
Shift from a generic to a personalised approach for the provision of patient food. There is a large benefit for the patient and their recovery if their nutrition is appropriate and tailored to them	• Leverage predicted investments in Electronic Health Record to collect more information on the patient as they enter the hospital (e.g. weight of patient) • Create specific nutritional choices for clients based on information provided through utilising dietitians and technology	Longer Term
Shift towards a much more technological and automated way of working so that staff have more time to provide patient support and perform specialised tasks	• Investigate and develop an automated system for food and linen delivery with staff assisting where specialist skills are required and to assist if there is a fault with the technology • Develop hand-held PID systems for patients so that they can order their own food or request other services without having to request it from nurses or wait until allocated times • Develop an automated system that checks licence plate numbers as they enter the	Longer Term

Identified service challenge	Potential service response	Time Frame
	hospital grounds to assist in understanding patient load and where staff are	
Reconfigure the current fleet model so that there are more specialised vehicles and so that vehicles can be used by staff when they are parked or in a period of down time	• Develop specialised vehicles where appropriate to enable more efficient delivery of services off-site (i.e. larger patient support vehicles) • Improve the utilisation of fleet vehicles through creating a system that tracks vehicles and when they are not being used so that other staff can use them	Medium Term
Develop the current IT architecture to support future development of IT services and security services that are simple to use, reliable and can be used off-site	• Simplify IT services and develop them further so that they can be used off site	Medium Term
Shift towards a minimalistic and sustainable way of purchasing and disposing of waste	• Improve current procurement contracts so that the product supplier must pick the waste generated (e.g. pick up empty cleaning bottles) • Investigate what can be done with other waste so that it can be recycled or sold (e.g. bailing cardboard) • Review how bins are organised and set up around the hospitals and community sites so that recycling can be done in an easy and proactive way	Immediate Term
Growth seen in recent years in ambulatory pharmacy and laboratory services, with far more of ambulatory type care predicted in the future	• Enabled by technology and development of ambulatory precinct, these will include early detection for cancers and cytotoxic test. Used in various inpatient services currently but service provision will need to match increasing focus of outpatient and day-stay settings • Potential for link with development of ADU and daystay wards, or discrete day stay words for key growth areas (i.e. MAB day ward) • Link also with home and community care delivery of services as currently seen with diabetes and warfarin, with analyser and test conducted by patient with advice (i.e. diabetes and warfarin analysers and treatment pathways)	Immediate - Medium Term
Laboratory and Haematology services currently handle an array of case complexity across referring services, making it difficult to operate effectively or concentrate resources	• Devolution of more routine procedures to PHOs and community partners (e.g. iron management, transfusions, infusions)	Immediate - Medium Term
Compounding of cytotoxic potentially a key issue for provision of local medical oncology and chemotherapy. Current plans indicate no compounding, but only have one commercial player (Baxters) and places capability at risk in case compounding is required	• Link with ongoing planning of medical oncology regionally	Immediate - Medium Term
Facilities & Assets		
Most clinical support services require planned infrastructure to ensure efficiency and longevity of assets (i.e. laboratory, pharmacy and food). As new infrastructure is being developed forward thinking plans are	• Create a timeline of future infrastructure builds and proactively reach out to the key stakeholders to ensure that clinical support services can provide advice and feedback • Determine what potential model of care changes may occur within clinical support	Medium Term

Identified service challenge	Potential service response	Time Frame
required and clinical support services need to be part of the initial conversations and planning as future changes are either not possible or result in significant cost	and ensure that future infrastructure builds have the potential to be adapted in the future to allow for them	
There is a lack of standardised asset purchasing and management, with assets that are not appropriate for a high volumes hospital setting being purchased	• Continue to leverage ongoing efforts towards longer term asset purchasing and modelling of asset usage to demand • Create an approved list of assets that people can purchase (i.e. industrial washing machines versus cheaper residential washing machines) and set up processes so that divisions can only purchase from the approved list	Immediate Term
Space constraints within Laboratory and Pharmacy limit the ability to keep up with best practice technology and practice	• Include these services in refurbishment and future facilities development to ensure adequate room and future proofing exists within facilities	Medium - Longer Term
Shift towards standardisation of assets and of rooms, especially for patient space and bathrooms. At present there is a variety of different plans for similar spaces which causes issues for staff and results in inefficiencies	• Create a list of approved room setups so that support services such as cleaning can be done in a more efficient way • Create standardised processes for storing assets and set up the needed processes to ensure people adhere to the processes made	Immediate Term
Flow cytometry linked with faster cancer treatment times, but currently outsourcing service at very expensive rates (estimated $700 per stain)	• Consider development of flow cytometry capability – linked with space and facilities issue	Immediate - Medium Term
While red blood supply is projected to remain sufficient, the growth in demand on essential by-products such as platelets and plasma has been exponential over recent years. This is a key demand concern for Laboratory and Pharmacy going forward, with certain patient types at risk of supply shortages (i.e. complex renal patients and platelets)	• Quantify growth in by-product usage and identify major referral services / patient types • Consider and establish contingency plans for additional sources of key by-products	Immediate - Medium Term
Commercial services (I.e. Fleet, Linen, and Food) are not adequately developed to cater to the growing demand. Additional conversations are required in order to determine what investment is needed to develop these services further.	• Investigate development for Commercial services (i.e. Fleet, Linen, and Food) services similar to other Divisions RDM analysis; ***(could not be completed in this Phase of the HSP as missing from the NZ RDM model)***	Medium - Longer Term
Information technology		
Improving the way clinical support communicates such as through telemed is vital for the future and currently the needed infrastructure is not available within the hospital settings	• Identify the role of telemed in both providing services and communicating with others both internally and externally as with the growing demand in the community it will not be possible to visit everyone face to face • Investigate the needed step change required to transition to a telemed model (i.e. what investment is required and what would the impact be)	Medium Term
Opportunity in both the immediate and longer term to leverage existing technology to improve efficiency and turnaround time in Laboratory and Pharmacy services	There are a wide range of technology improvements being proposed by Laboratory and Pharmacy services, including:	Immediate - Medium Term

Identified service challenge	Potential service response	Time Frame
	• Pharmacy currently scoping using of robotics to gain significant efficiencies in prescribing and dispensary, which is currently a very manual data entry and distribution process. eLabs piloted and showing huge improvements • RFID enabled linkages essential going forward; currently have patient barcoding but unable to link it through to prescribing and distribution, while opportunities such as RFI in fridges to count blood and temperature • Opportunity to tie in with handheld devices for phlebotomists; currently not labelled at besides as per requirements because have to go to printers for labelling • Track systems being investigated to enable more efficient laboratory services and allowing better utilisation of scientist Linked with facilities, the main issue currently facing services is the lack of space in current facilities to implement new technology	
Interoperability and community between systems is an issue in the hospital setting, but is even greater between Hospitals and clinics, GPs, and other community partners	• Link with Electronic Health Record for a pharmacy and laboratory module - from community through to patient mouth with a 'mymedicine' portal where GPs, pharmacists and specialists can all see and communicate on medicine	Medium - Longer Term
Workforce		
The demographics of the workforce are changing and will likely continue to change. There is currently an older workforce and it is difficult to train and retain young staff which will create a challenge in the future as there may be an FTE gap and difficulties in adapting to new technology	• Develop succession planning across clinical support services for the aging workforce • Develop a plan to attract the younger workforce which may include provisions for flexible working hours • Plan what the future capabilities would be for the workforce based on future model of care, technology and role changes	Medium Term
Current workforce is not sufficient to support proactive management of many clinical support services which has led to a lack of strategy		Immediate - Medium Term
There will need to be a more of an interdisciplinary workforce in the future which will be able to do additional tasks for other services that do not require a large amount of technical experience		Medium Term
Scope of practice for pharmacist likely to change in line with global and national trend for pharmacists to become prescribers of medicine	• Investigate and develop prescriber roles in WDHB and consider how it impacts model of care for key medicines	Immediate - Medium Term

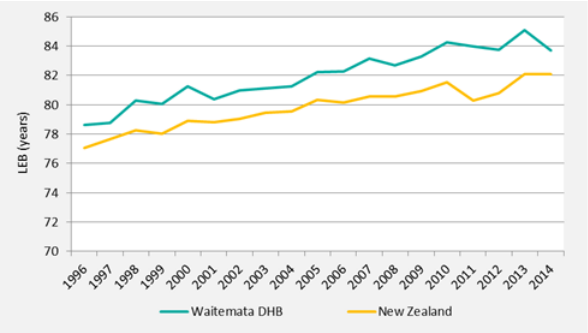
Appendix 5: Quality measures

The quality activities described in the transformation are centred on two key outcomes by 2025:

Highest life expectancy in New Zealand

- Life expectancy at birth (LEB) is recognised as a general measure of population health status. Overall, WDHB continues to have the highest life expectancy in the country at around 83.7 years, which is 1.5 years higher than New Zealand as a whole. In Waitemata, life expectancy has increased by 2.4 years over the last decade, a similar increase to that seen in New Zealand as a whole

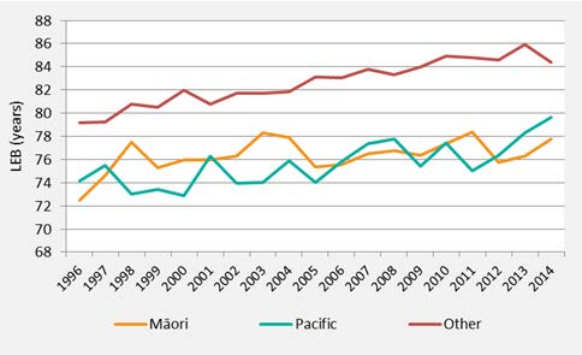
Outcome Measure – An increase in life expectancy at birth



Reduce difference in health outcomes

- There are significant differences in life expectancy between ethnic groups within WDHB districts. Māori and Pacific people have a lower life expectancy compared with other ethnicities, with a gap of 8 years for Māori and Pacific; this gap appears to be increasing
- Circulatory system diseases and cancers accounted for half of the difference in life expectancy between Māori or Pacific people versus NZ European/others in Waitemata
- Although life expectancy is increasing in WDHB's Maori and Pacific populations, the rate of increase is not as large as that seen in WDHB's other population groups

Outcome Measure – A reduction in the ethnic gap in life expectancy at birth



Prevent ill health – support people to be healthier and take more responsibility

WDHB aims to encourage people to take responsibility for their health through making healthy lifestyle choices and engaging in preventative strategies, such as childhood immunisation programmes and disease risk assessments. WDHB's focus in this area is on smoking, obesity, and children's health. In these areas, WDHB will ensure that people are better protected from harm, informed of the signs and symptoms of ill health, and supported to lead healthy lives. WDHB will create health-promoting physical and social

environments, which support people to take more responsibility for their own health and make healthier choices.

Outcome	Measures	Performance 2015 / 16	Target 2017	Target 2018
A smokefree Waitemata by 2025	% of regular smokers	12%	TBD	TBD
	% of hospitalised patients who smoke are offered brief advice and support to quit	33%	TBD	TBD
Halt the rise in obesity	% of adults who are obese	18%	TBD	TBD
	% of adults meeting physical activity guidelines	45%	TBD	TBD
Children get the best possible start in life	Infant mortality per 1,000 live births	2.3	TBD	TBD
	% of 8 month children who are fully immunised	93%	95%	TBD
	% of maternal smoking	6%	TBD	TBD

To cure ill health – support people to stay well with early detection and effective management

WDHB aims to improve the detection and management of cancer and cardiovascular disease as well as providing rapid assessment and treatment for patients when they are ill. Significant progress has been made in improving the management of ill health. This is reflected in the reduction in the rates of mortality from CVD and cancer. However, more can be done to increase the number of years of healthy life lived and reduce disability for WDHB patients, particularly for WDHB's Māori and Pacific populations.

Outcome	Measures	Performance 2015 / 16	Target 2017	Target 2018
The lowest mortality from cardiovascular disease (CVD)	CVD mortality rate per 100,000 population	98	TBD	TBD
	% of CVD population aged 30+ receiving and adhering to triple therapy	57.5%	70%	TBD
	Sum of Quality Adjusted Life Years gained from coronary artery by-pass grafting and angioplasty (measures the length and quality of extra years gained by a medical/surgical intervention)	1,530	TBD	TBD
The lowest mortality from cancer	Rate of cancer per 100,000 population	117	TBD	TBD
	% of cancer survivors (5 year rate)	69.2%	TBD	TBD

Ameliorate ill health – support people with timely, safe, high quality and compassionate services

Health services play a major role in providing intensive assessment and treatment when people are experiencing less than optimal health. Services also support people to regain their functionality after

experiencing ill health and to remain healthy and independent. WDHB's focus in this area is on ensuring people suffering mental ill health are able to access high quality and timely services and support, the older population experience independence and quality of life, and WDHB's patients stay safe when in WDHB hospitals.

Outcome	Measures	Performance 2015 / 16	Target 2017	Target 2018
Reduced morbidity and mortality from mental illness	Suicide rate per 100,000 population	9	TBD	TBD
	% of individuals aged <19 and 20–64 years with access to mental health services	2.8% 3.5%	TBD TBD	TBD TBD
Older people experience independence and quality of life	% of our older population receiving home-based support or living in aged residential care	HBS: 7.9% ARC: 3.6%	TBD TBD	TBD TBD
	QALYs gained from cataract, knee and hip procedures in our 65+ population	1,900	TBD	TBD
Patients stay safe in our hospitals	Hospital-standardised mortality ratio	0.78	TBD	TBD
	Central line-associated bloodstream infections per 1,000 line days	0.7	<1	TBD

Appendix 6: Service specific clinical quality metrics

Department	Metric
ICU Clinical quality lead: Anne-Marie Mitchell	Hand Hygiene Compliance
	Central line assoc Bacteraemia
	Pressure injury prevalence
	Falls prevalence
	Re-intubation
	Unplanned extubations
	Delayed discharge to the ward (>6 hours)
	Discharge after 1800hrs
Anaesthetics Clinical quality lead: Andrew Love	Perioperative normothermia
	Prolonged stay in PACU
	Pain in PACU
	Nausea/vomiting PACU
General Surgery Clinical quality lead: Andrew Moot	Same day treatment of abscess
	Anastomotic leak post-colorectal surgery
	Anastomotic leak post-upper GI surgery
	Leak post cholecystectomy
Orthopaedics Clinical quality lead: Peter Misur	#NOF time to theatre (48hrs from admission)
	DVT rates post orthopaedic surgery
	Surgical site infections post hip and knee arthroplasties
Urology Clinical quality lead: Tony Beaven	Sepsis complications post TRUS Biopsy
	Outcomes following investigation for haematuria
	Complications post-prostatectomy

Medicine and Health of Older Persons clinical indicators

The following list is a list of clinical indicators from MHOP as at August 2015.

These metrics are at various stages. Some have data currently available, some are proposed and they are across a variety of reporting horizons (Annual, half yearly, quarterly).

Service	Indicator Name	Definition
MHOPS	In-hospital deaths among patients under the care of MHOPS	In-hospital mortality for patients under the care of the division of Medicine & Health of Older people. Presented in two ways: 1. HSMR (hospital standardised mortality ratio), for methods see notes column 2. Total number of deaths (for exclusions see notes column)
General Medicine	Appropriate medications for patients with congestive heart failure	% of inpatients with CHF receiving appropriate medication (ACE I, spironalactone, beta blocker) (and if not, why not)
General Medicine	Readmission rate of patients with	% of inpatients with CHF who were readmitted within

Service	Indicator Name	Definition
	congestive heart failure	xx days of admission
General Medicine	Hospital mortality rate of patients with CHF (?include post discharge deaths)	
Cardiology	ACS 28-day outcome	Death or MI readmission within 28 days for patients admitted to the coronary care unit with ACS (age-standardised to total NZ ACS population)
Dermatology	Psoriasis improvement with anti-TNF (tumour necrosis factor) agent	% of people with psoriasis and initiated on anti-TNF therapy (e.g. etanercept) who achieve a clinically significant response
Emergency Medicine	Time to antibiotics for patients presenting to ED with sepsis	The length of time it takes for eligible patients with Sepsis (SIRS [systematic inflammatory response syndrome] criteria with probable infection) to receive appropriate antibiotics
Emergency Medicine	Time to analgesia (renal colic)	Length of time it take for appropriate analgesia to be given in patients with Renal colic
Emergency Medicine	7-day re-presentation rate	The proportion of patients seen and discharged by Emergency Medicine who re-present with a related problem within 7 days of discharge
Endocrinology	Glycaemic control among patients with type 1 diabetes	Mean HBA1C (and % with HBA1C >65mmol/mol) for patients with type 1 diabetes and younger than 30 years of age and attending a WDHB diabetes clinic
Endocrinology	Wound healing for diabetic patients with high risk foot and active foot complications	Proportion of diabetic patients with high risk foot and active foot complication with wound healing within 6 months from date of wound onset
Endocrinology	Hypoglycaemia among inpatients on insulin	% of inpatients on insulin who have at least one episode of hypoglycaemia during their admission
Gastroenterology	Global Rating Scale (GRS) for endoscopy	GRS for endoscopy in four domains: clinical quality, patient experience, training, workforce
Geriatric medicine	Discharge independence	% discharged to accommodation that allowed for the same or greater independence
Haematology	Overall myeloma survival	Kaplan-Meier estimate of overall survival for patients with myeloma
Hyperbaric Medicine	Chronic wound improvement	% of those with significant improvement in chronic wound following hyperbaric oxygen therapy
Infectious diseases	Readmission for prosthetic joint infection	% of patients with prosthetic joint infection who are readmitted within 90 days
Infectious diseases	Readmission for infective endocarditis	% of patients with infective endocarditis who are readmitted within 90 days
Infectious diseases	Readmission for staph aureus bacteremia	% of patients with staph aureus bacteremia who are readmitted within 90 days
Palliative care	Patient/carer satisfaction (service-specific questionnaire)	% of patients/carers that are satisfied with inpatient palliative care consultation
Psychiatry of older age	Significant improvement in outcome (inpatient and outpatient)	% of patients (inpatients and outpatients) with significant improvement in HONOS (will also need to measure % of patients with change in HONOS available)
Renal	Dialysis survival	Median time to mortality in dialysis patients (stratified by age at starting dialysis)

Service	Indicator Name	Definition
Renal	Transplant prevalence	Transplantation rate for the Waitemata population
Respiratory	ABG for COPD patients within 2 hours of admission (and how many got on the pathway)	% of patients with COPD who have an ABG within 2 hours of being admitted
Respiratory	1-year relative survival for lung cancer	1-year relative survival for patients with lung cancer (Ederer II method)
Rheumatology	Rheumatoid arthritis patients on disease-modifying antirheumatic drugs (DMARDs)	% of rheumatoid arthritis patients who are on a DMARD
Stroke	Stroke 30-day fatality rate	% of patients with ischaemic stroke who have died within 30 days of admission
Stroke	Stroke 90 day accommodation independence	% patients in accommodation at same or greater independence 90 days post admission for stroke

Appendix 7: DHB benchmarking

The below FY 13/14 information has been retrieved from the NCCP Data Cubes which contain information on the 12 DHBs that sent data through to the Ministry of Health (MoH). This was used to assess how WDHB was performing by Purchase Unit relative to other DHBs. The information below is indicative only and may change based on future NCCP updates.

FY 13/14 Events													
Purchase Units	Northland DHB	Waitemata DHB	Auckland DHB	Counties Manukau DHB	Waikato DHB	Lakes DHB	Bay of Plenty DHB	Tairawhiti DHB	Taranaki DHB	Hawkes Bay DHB	Capital & Coast DHB	Canterbury DHB	Grand Total
D01001 - Inpatient Dental treatment	476		2,294	666	855	297	609	92	382	227	691	814	**7,403**
M00001 - General Internal Medical Services - Inpatient Services (DRGs)	9,281	27,583	12,674	19,207	11,082	5,310	10,277	2,037	4,183	8,700	11,254	14,156	**135,744**
M05001 - Emergency Medical Services Inpatient Services (DRGs)	4,824	19,193	17,585	14,725	16,518	4,880	6,157	799	5,299	4,278	8,465	5,265	**107,988**
M10001 - Cardiology - Inpatient Services (DRGs)	18	3,009	4,728	2,439	4,600		2,644		588	254	4,176	6,432	**28,888**
M10005 - Specialist Paediatric Cardiac - Inpatient Services (DRGs)			1,178										**1,178**
M15001 - Dermatology - Inpatient Services (DRGs)		6	321		26		10					48	**411**
M20001 - Endocrinology & Diabetic - Inpatient Services (DRGs)		82	510	113	194		20			3	56	13	**991**
M25001 - Gastroenterology - Inpatient Services (DRGs)	4	1,094	1,578	1,370	1,104	27	418		7	250	302	1,236	**7,390**
M30001 - Haematology - Inpatient Services (DRGs)		515	1,357	600	1,329		15		85	8	700	923	**5,532**
M34001 - Specialist Paediatric Haematology			821										**821**
M40001 - Infectious Diseases (incl Venereology) - Inpatient Services (DRGs)		1	235	11			23				8	22	**300**
M45001 - Neurology - Inpatient Services (DRGs)			1,752		663		16			1	834	1,126	**4,392**
M49001 - Specialist Paediatric Neurology			559										**559**
M50001 - Oncology - Inpatient Services (DRGs)	15		3,503		1,273		202		4		1,863	1,751	**8,611**
M54001 - Specialist Paediatric Oncology			641		26						126	700	**1,493**
M55001 - Paediatric Medical Service (Inpatient)	2,200	3,366	3,041	5,613	2,906	1,407	3,204	921	918	1,731	2,567	6,233	**34,107**
M60001 - Renal Medicine - Inpatient Services (DRGs)	347	1,017	2,219	1,712	1,096		3	2	16	6	530	731	**7,679**
M65001 - Respiratory - Inpatient Services (DRGs)		60	2,605	1,021	3,142		180		2	3	689	1,806	**9,508**
M70001 - Rheumatology (incl Immunology) - Inpatient Services (DRGs)		142	1,704	155	8		194				413	889	**3,505**
M80001 - Palliative Medical Services - Inpatient Services (DRGs)					15		261	9				23	**308**
S00001 - General Surgery - Inpatient Services (DRGs)	4,670	9,977	9,113	11,439	7,250	2,999	5,775	1,467	3,242	3,207	4,428	8,378	**71,945**
S05001 - Anaesthesia Services - Inpatient Services (DRGs)	57	10			141	2	141	23	6	1	92		**473**
S15001 - Cardiothoracic - Inpatient Services (DRGs)			1,594		962						824	561	**3,941**
S25001 - Ear, Nose and Throat - Inpatient Services (DRGs)	1,155	1,673	5,547	2,090	2,025	638	749	341	569	692	1,529	2,507	**19,515**
S30001 - Gynaecology - Inpatient Services (DRGs)	1,068	4,217	5,410	4,722	2,833	908	1,569	323	1,071	1,134	3,143	5,383	**31,781**
S35001 - Neurosurgery - Inpatient Services (DRGs)			1,816		758					1	1,044	1,000	**4,619**
S40001 - Ophthalmology - Inpatient Services (DRGs)	1,263		7,329	2,542	1,945	543	1,024	246	512	1,237	2,348	1,793	**20,782**
S45001 - Orthopaedics - Inpatient Services (DRGs)	3,032	6,962	8,063	7,151	5,131	2,518	4,853	937	1,649	3,208	3,957	6,024	**53,485**
S55001 - Paediatric Surgical Services	2		3,532		1,780	26				2	1,214	1,566	**8,122**
S60001 - Plastic & Burns - Inpatient Services (DRGs)	116	6		8,659	3,645		314	51		340		3,732	**16,863**
S70001 - Urology - Inpatient Services (DRGs)	1,020	963	3,630	350			466	78	472	907	1,346	2,239	**11,471**
S75001 - Vascular Surgery - Inpatient Services (DRGs)			1,581		1,360		269			32	1,256	1,014	**5,512**
W06003 - Specialist neonates	423	1,266	2,452	2,159	1,818	570	569	147	360	558	1,158	1,704	**13,184**
W10001 - Maternity inpatient (DRGs)	3,114	14,578	15,218	13,946	6,828	2,236	5,160	1,265	2,615	4,626	7,029	11,476	**88,091**
Grand Total	**33,085**	**95,720**	**124,590**	**100,690**	**81,313**	**22,361**	**45,122**	**8,738**	**21,980**	**31,406**	**62,042**	**89,545**	**716,592**

FY 13/14 Average Length of Stay													
Purchase Units	Northland DHB	Waitemata DHB	Auckland DHB	Counties Manukau DHB	Waikato DHB	Lakes DHB	Bay of Plenty DHB	Tairawhiti DHB	Taranaki DHB	Hawkes Bay DHB	Capital & Coast DHB	Canterbury DHB	**Grand Total**
D01001 - Inpatient Dental treatment	0.14		0.03	1.99	0.02	0.02	0.21	0.03	0.50	0.09	0.03	0.02	**0.25**
M00001 - General Internal Medical Services - Inpatient Services (DRGs)	3.07	3.49	3.09	3.27	3.24	3.24	3.76	3.87	3.97	3.84	2.56	3.28	**3.33**
M05001 - Emergency Medical Services Inpatient Services (DRGs)	0.18	0.21	0.22	0.32	0.24	0.19	0.16	0.12	0.12	0.25	0.18	0.22	**0.22**
M10001 - Cardiology - Inpatient Services (DRGs)	0.67	3.34	2.51	4.00	3.11		2.39		1.83	0.66	1.73	1.93	**2.53**
M10005 - Specialist Paediatric Cardiac - Inpatient Services (DRGs)			5.17										**5.17**
M15001 - Dermatology - Inpatient Services (DRGs)		-	2.41		1.73		-					0.15	**2.01**
M20001 - Endocrinology & Diabetic - Inpatient Services (DRGs)		0.10	1.67	3.91	1.21		0.60			10.33	0.20	0.69	**1.61**
M25001 - Gastroenterology - Inpatient Services (DRGs)	0.75	0.09	2.58	2.20	1.15	0.44	0.16		-	1.16	2.32	2.44	**1.70**
M30001 - Haematology - Inpatient Services (DRGs)		1.83	6.55	3.89	4.10		0.27		-	1.50	5.98	5.19	**4.81**
M34001 - Specialist Paediatric Haematology			5.33										**5.33**
M40001 - Infectious Diseases (incl Venereology) - Inpatient Services (DRGs)		-	5.33	4.55			0.26				9.75	4.73	**4.97**
M45001 - Neurology - Inpatient Services (DRGs)			3.32		2.96		0.25			-	2.63	2.42	**2.89**
M49001 - Specialist Paediatric Neurology			3.27										**3.27**
M50001 - Oncology - Inpatient Services (DRGs)	-		3.24		4.02		4.04		-		4.13	3.86	**3.68**
M54001 - Specialist Paediatric Oncology			3.46		3.42						2.63	3.10	**3.22**
M55001 - Paediatric Medical Service (Inpatient)	1.88	1.59	2.95	1.69	2.68	1.93	1.68	1.79	1.98	2.11	2.57	1.07	**1.88**
M60001 - Renal Medicine - Inpatient Services (DRGs)	3.53	3.48	3.51	3.91	4.26		1.67	-	0.06	15.17	3.94	3.64	**3.74**
M65001 - Respiratory - Inpatient Services (DRGs)		1.35	4.84	4.55	3.22		0.48		-	1.33	3.42	4.47	**3.99**
M70001 - Rheumatology (incl Immunology) - Inpatient Services (DRGs)		-	0.20	3.75	-		0.02				0.02	0.09	**0.29**
M80001 - Palliative Medical Services - Inpatient Services (DRGs)					0.93		7.83	8.67				4.26	**7.25**
S00001 - General Surgery - Inpatient Services (DRGs)	2.97	3.22	3.36	3.55	3.75	3.05	2.79	2.60	2.90	3.40	3.16	3.13	**3.25**
S05001 - Anaesthesia Services - Inpatient Services (DRGs)	-	-			0.01	-	-	-	0.17	-	0.08		**0.02**
S15001 - Cardiothoracic - Inpatient Services (DRGs)			10.01		9.53						8.62	9.13	**9.48**
S25001 - Ear, Nose and Throat - Inpatient Services (DRGs)	0.67	0.12	1.62	0.39	1.16	0.59	0.70	0.94	0.65	0.71	0.99	1.27	**1.02**
S30001 - Gynaecology - Inpatient Services (DRGs)	1.43	1.16	1.10	1.41	1.49	1.32	1.17	0.92	1.01	1.55	1.07	0.83	**1.17**
S35001 - Neurosurgery - Inpatient Services (DRGs)			7.11		6.41					-	5.37	5.52	**6.26**
S40001 - Ophthalmology - Inpatient Services (DRGs)	0.17		0.30	0.01	0.45	0.03	0.04	0.14	0.14	0.15	0.30	0.59	**0.26**
S45001 - Orthopaedics - Inpatient Services (DRGs)	3.49	3.96	3.59	4.29	4.40	2.49	3.94	3.34	3.66	3.32	3.92	4.30	**3.87**
S55001 - Paediatric Surgical Services	-		1.82		1.28	-				0.50	1.46	1.04	**1.49**
S60001 - Plastic & Burns - Inpatient Services (DRGs)	1.22	1.00		1.77	1.78		0.83	0.51		0.69		1.53	**1.68**
S70001 - Urology - Inpatient Services (DRGs)	2.12	1.53	2.21	0.77			2.57	1.32	1.59	2.57	2.22	1.55	**1.99**
S75001 - Vascular Surgery - Inpatient Services (DRGs)			4.92		3.88		5.91			0.22	3.89	3.05	**4.11**
W06003 - Specialist neonates	7.21	7.15	8.01	6.07	7.63	4.98	6.87	6.72	9.08	8.99	12.34	9.54	**7.99**
W10001 - Maternity inpatient (DRGs)	1.74	1.94	2.02	1.42	1.64	1.92	2.04	1.98	2.19	2.15	2.19	1.58	**1.84**
Grand Total	2.19	2.34	2.49	2.31	2.48	2.01	2.43	2.39	2.14	2.56	2.43	2.42	**2.39**

FY 13/14 Average WIES													
Purchase Units	Northland DHB	Waitemata DHB	Auckland DHB	Counties Manukau DHB	Waikato DHB	Lakes DHB	Bay of Plenty DHB	Tairawhiti DHB	Taranaki DHB	Hawkes Bay DHB	Capital & Coast DHB	Canterbury DHB	Grand Total
D01001 - Inpatient Dental treatment	0.5		0.5	1.2	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	**0.6**
M00001 - General Internal Medical Services - Inpatient Services (DRGs)	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	0.8	1.0	**0.8**
M05001 - Emergency Medical Services Inpatient Services (DRGs)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	**0.3**
M10001 - Cardiology - Inpatient Services (DRGs)	0.4	1.4	1.7	1.3	1.5		0.9		0.6	0.6	1.4	1.1	**1.3**
M10005 - Specialist Paediatric Cardiac - Inpatient Services (DRGs)			3.8										**3.8**
M15001 - Dermatology - Inpatient Services (DRGs)		0.3	0.7		0.7		0.5					0.3	**0.6**
M20001 - Endocrinology & Diabetic - Inpatient Services (DRGs)		0.3	0.6	0.9	0.4		0.4			1.3	0.4	0.7	**0.6**
M25001 - Gastroenterology - Inpatient Services (DRGs)	0.5	0.4	0.9	0.9	0.7	0.5	0.5		0.5	0.8	0.8	0.9	**0.8**
M30001 - Haematology - Inpatient Services (DRGs)		0.8	2.0	1.1	1.4		0.5		0.4	0.5	1.9	1.7	**1.5**
M34001 - Specialist Paediatric Haematology			1.7										**1.7**
M40001 - Infectious Diseases (incl Venereology) - Inpatient Services (DRGs)		0.5	1.6	1.2			0.4				2.3	1.1	**1.4**
M45001 - Neurology - Inpatient Services (DRGs)			1.0		1.0		0.3			0.5	1.0	0.9	**0.9**
M49001 - Specialist Paediatric Neurology			1.2										**1.2**
M50001 - Oncology - Inpatient Services (DRGs)	0.4		0.9		1.3		1.1		0.4		1.2	1.2	**1.1**
M54001 - Specialist Paediatric Oncology			1.1		1.0						0.9	1.2	**1.1**
M55001 - Paediatric Medical Service (Inpatient)	0.6	0.5	0.9	0.5	0.7	0.7	0.5	0.5	0.6	0.6	0.7	0.4	**0.6**
M60001 - Renal Medicine - Inpatient Services (DRGs)	1.0	1.0	1.5	1.2	1.3		1.3	0.4	0.3	3.1	1.6	1.3	**1.3**
M65001 - Respiratory - Inpatient Services (DRGs)		0.7	1.3	1.3	0.9		0.5		0.6	0.5	0.9	1.2	**1.1**
M70001 - Rheumatology (incl Immunology) - Inpatient Services (DRGs)		0.4	0.5	0.8	0.4		0.2				0.5	0.5	**0.5**
M80001 - Palliative Medical Services - Inpatient Services (DRGs)					0.7		1.5	1.3				1.1	**1.4**
S00001 - General Surgery - Inpatient Services (DRGs)	1.1	1.2	1.3	1.2	1.4	1.1	1.1	1.0	1.2	1.4	1.4	1.3	**1.2**
S05001 - Anaesthesia Services - Inpatient Services (DRGs)	0.2	0.4			0.4	0.5	0.2	0.3	0.4	0.5	0.4		**0.3**
S15001 - Cardiothoracic - Inpatient Services (DRGs)			7.0		6.3						6.6	5.3	**6.5**
S25001 - Ear, Nose and Throat - Inpatient Services (DRGs)	0.7	0.7	0.9	0.7	0.8	0.6	0.7	0.8	0.7	0.7	0.7	0.9	**0.8**
S30001 - Gynaecology - Inpatient Services (DRGs)	0.8	0.6	0.6	0.7	0.8	0.7	0.7	0.8	0.6	0.8	0.7	0.6	**0.7**
S35001 - Neurosurgery - Inpatient Services (DRGs)			3.6		3.9					0.5	3.5	2.8	**3.5**
S40001 - Ophthalmology - Inpatient Services (DRGs)	0.5		0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.7	**0.6**
S45001 - Orthopaedics - Inpatient Services (DRGs)	1.7	1.8	1.6	1.9	2.1	1.5	1.7	1.5	1.8	1.6	1.9	1.8	**1.8**
S55001 - Paediatric Surgical Services	0.8		1.0		0.8	0.6				0.7	0.9	0.8	**0.9**
S60001 - Plastic & Burns - Inpatient Services (DRGs)	0.9	1.4		1.0	1.0		0.8	1.0		0.7		1.0	**1.0**
S70001 - Urology - Inpatient Services (DRGs)	0.9	1.2	1.0	0.9			0.8	1.2	0.9	1.0	1.2	1.1	**1.1**
S75001 - Vascular Surgery - Inpatient Services (DRGs)			2.3		2.0		2.4			1.2	2.3	2.1	**2.2**
W06003 - Specialist neonates	1.6	1.6	1.8	1.5	1.6	1.1	1.3	1.4	1.7	1.8	3.0	1.9	**1.7**
W10001 - Maternity inpatient (DRGs)	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	**0.5**
Grand Total	**0.8**	**0.8**	**1.0**	**0.8**	**1.0**	**0.8**	**0.8**	**0.8**	**0.8**	**0.9**	**1.1**	**1.0**	**0.9**

6.1 Performance

Recommendation:

That the following performance reports for the month and attachments be received:

1 **Financial Performance - DHB Consolidated**
2 **Financial Performance - DHB Arms**
3 **Financial Performance - Other Indicators / Trends**
4 **Capital Expenditure**
5 **Financial Position**
6 **Cashflow Position**
7 **Treasury**

Prepared by: Avinesh Anand (Acting Group Manager Corporate Finance and Planning)
Endorsed by: Rosemary Chung (Deputy CFO) and Robert Paine (Chief Financial Officer and Head of Corporate Services)

1 Financial Overview of the 2015/16 result

The planned 2015/16 financial result for Waitemata DHB is a surplus of $2.811m with $1.811m to be generated in the Funder arm and $1m in the Provider Arm and breakeven result in the Governance Arm.

For the month of September, the consolidated DHB result is a surplus of $3.461m against a budgeted surplus of $3.299m and is therefore $162k favourable to budget. The Provider arm is $2.65m unfavourable to budget, the Funder arm is $2.813m favourable to budget. The Governance and Funding Arm is on budget.

Year to date (YTD), the consolidated DHB result is a surplus of $3.046m against a budgeted surplus of $2.877m and is therefore $169k favourable to budget. The Governance and Funding Admin arm is $37k favourable to budget, the Funder arm is $3.304m favourable to budget and the Provider arm is $3.172m unfavourable to budget.

The financial result for the month of September 2015 compared to the budget is summarised in the table below.

WAITEMATA DISTRICT HEALTH BOARD — Reporting Date: 30 September 2015

CONSOLIDATED STATEMENT OF FINANCIAL PERFORMANCE

($000's)	MONTH			YEAR TO DATE			FULL YEAR		
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance
REVENUE									
Crown	128,192	128,007	185	384,942	384,164	778	1,535,311	1,535,311	0
Other	2,533	2,080	454	7,058	6,364	694	28,149	28,149	0
	130,726	**130,086**	**639**	**392,000**	**390,528**	**1,472**	**1,563,460**	**1,563,460**	**0**
EXPENDITURE									
Personnel									
- Medical	13,125	12,480	(644)	38,020	37,429	(591)	163,644	163,644	0
- Nursing	16,259	16,123	(136)	55,480	56,274	794	213,833	213,833	0
- Allied Health	8,041	8,421	380	24,277	24,616	338	105,964	105,964	0
- Support	1,098	1,230	133	3,309	3,678	369	15,858	15,858	0
- Management / Administration	5,538	5,252	(286)	15,864	15,729	(135)	67,499	67,499	0
Total Personnel	**44,061**	**43,507**	**(554)**	**136,950**	**137,725**	**776**	**566,800**	**566,800**	**0**
Other									
Outsourced Services	7,106	5,647	(1,460)	19,612	16,935	(2,678)	67,023	67,023	0
Clinical Supplies	9,501	8,897	(603)	28,613	26,344	(2,269)	101,429	101,429	0
Infrastructure & Non-Clinical Supplies	8,583	7,764	(818)	26,051	23,729	(2,322)	93,732	93,732	0
Funder Provider Payments	58,014	60,972	2,958	177,727	182,916	5,189	731,666	731,666	0
	83,204	**83,280**	**77**	**252,004**	**249,925**	**(2,079)**	**993,849**	**993,849**	**0**
Total Expenditure	**127,265**	**126,787**	**(478)**	**388,954**	**387,650**	**(1,304)**	**1,560,649**	**1,560,649**	**0**
NET RESULT	**3,461**	**3,299**	**162**	**3,046**	**2,877**	**169**	**2,811**	**2,811**	**0**

Comment on major variances

Revenue

Revenue was $639k favourable to budget for the month, due to donations, interest received and other income.

Expenditure
Overall expenditure was unfavourable to budget by $478k for the month. Unfavourable variances were realised in non-staff costs driven by outsourced colonoscopies, PCT (cancer drugs) expenditure, and locum and nursing bureau costs.

- **Personnel Costs ($776k favourable year to date):**

Although vacancies have contributed to underspend in some staff categories, vacancies are not being deliberately held in front line clinical staff other than in areas under review. There is always a persistent level of staff vacancies, caused by the normal day to day turnover of staff. In all clinical areas vacancies are minimised where possible.

Variances in Personnel Cost categories were as follows:

- Medical staff costs are unfavourable by $591k, mostly due to overspend in Medical and Health of Older People Services $318k, Surgical and Ambulatory Service $100k and Mental Health $174k. These unfavourable variances arise mainly due to increase to ED presentations, higher than budgeted sick leave and lower than anticipated annual leave uptake.

- Nursing staff costs are favourable by $794k. This favourable variance is primarily due to delays in recruitment across the Provider Arm and higher than anticipated annual leave. External bureau is being used to meet roster and cover requirements in medical wards and Emergency Department, leading to overspends in outsourced costs.

- Allied Health staff costs were favourable to budget by $338k for the year to date mostly due to vacancies savings due to delays in recruitment.

- Support staff costs are favourable by $369k, mainly reflecting cleaners and orderly churn in vacancies, with corresponding unbudgeted costs in the outsourced staff cost category.

- Management and Admin staff costs are unfavourable by $135k.

- **Outsourced Services Costs ($2.678m unfavourable for the year to date):**
  - Overall, outsourced staff costs were adverse by $2.068m reflecting high external bureau for nursing cover and agency costs for casual orderlies and cleaners (offsetting vacancy savings in Support Personnel) and clinical typing.
  - Outsourced clinical services were unfavourable to budget by $610k mainly due unmet savings targets.

- **Clinical Supplies Costs ($2.269m unfavourable for the year to date):**
  Significant overspends in clinical supplies were incurred in:
  - Medicine and Health of Older People services ($374k); this over spend is principally due to higher than budget PCT drug costs ($230k unfavourable) stemming from high haematology patient numbers and the widening of the use of these drugs in rheumatology. Higher than expected volumes in Acute medicine ($81k YTD over budget) and ED Presentations (6% YTD over budget).
  - Hospital Operations ($377k), mainly due to volume driven costs of pharmacy $136k and laboratory consumables $222k.
  - Provider Management and Corporate Services ($841k) due to budgeted savings not being achieved.

- **Infrastructure costs ($2.322m unfavourable for the year to date):**
  The unfavourable variance relates in part to one off non-capital Project Cost write off $539k, unbudgeted maintenance for environmental testing $177k, and electricity budget phasing variances of $196k. The variance also includes $1.521m unmet savings targets.

- **Funder Provider Payments ($5.189m favourable for the year to date):**
  Funder Provider payments as reported in the Consolidated Statement of Financial Performance table is inclusive of Funder NGO payments and Funder IDF payments but do not include payments made to the Waitemata Provider Arm. Key drivers of the favourable variance include $1.3m of budgeted IDF risk that is not being accrued against, $0.9m relating to a post budget revision by PHARMAC of their 2015/16 rebate forecast, $1.7m relating to a 2014/15 PHARMAC rebate upside and a net favourable variance of $0.7m relating to budgeted NGO provider services.

2 Financial Performance - DHB Arms

The financial performance for each of the DHB Arms for the month and the year is summarised in the table below, and the detailed statement of Financial Performance by DHB Arm is attached to this report **(Attachment 1).**

WAITEMATA DISTRICT HEALTH BOARD — **Reporting Date** 30 September 2015

FINANCIAL PERFORMANCE BY DHB ARM

($000's)	MONTH			YEAR TO DATE			FULL YEAR		
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance
REVENUE									
Provider Arm - Clinical Services	4,924	4,556	369	14,848	13,811	1,037	53,838	53,838	0
Provider Arm - Corporate & Support Services	63,776	63,410	366	192,497	190,354	2,143	762,493	762,493	0
Governance & Funding Admin Arm	1,047	998	50	3,171	2,993	178	11,972	11,972	0
Funder Arm - Own Provider/Governance	62,458	62,411	48	187,351	187,232	118	0	0	0
Funder	123,711	123,534	177	370,890	370,602	288	464,423	464,423	0
Elimination	(62,733)	(62,411)	(322)	(189,406)	(187,232)	(2,173)	269,054	269,054	0
Consolidated	**130,726**	**130,086**	**639**	**392,000**	**390,528**	**1,472**	**1,561,780**	**1,561,780**	**0**
EXPENDITURE									
Provider Arm - Clinical Services	50,176	48,497	(1,679)	156,339	152,597	(3,741)	624,768	624,768	0
Provider Arm - Corporate & Support Services	18,028	16,321	(1,707)	51,754	49,144	(2,610)	190,563	190,563	0
Governance & Funding Administration	1,047	998	(50)	3,134	2,993	(141)	11,972	11,972	0
Funder	120,747	123,383	2,636	367,133	370,149	3,016	462,612	462,612	0
Elimination	(62,733)	(62,411)	322	(189,406)	(187,232)	2,173	269,054	269,054	0
Consolidated	**127,265**	**126,787**	**(478)**	**388,954**	**387,650**	**(1,304)**	**1,558,969**	**1,558,969**	**0**
NET RESULT									
Provider Arm - Clinical Services	(45,251)	(43,941)	(1,310)	(141,490)	(138,786)	(2,704)	(570,930)	(570,930)	0
Provider Arm - Corporate & Support Services	45,748	47,089	(1,341)	140,743	141,211	(468)	571,930	571,930	0
Governance & Funding Admin Arm	0	(0)	0	37	(0)	37	0	0	0
Funder	2,964	151	2,813	3,757	453	3,304	1,811	1,811	0
Elimination	0	(0)	0	0	(0)	0	0	0	0
Consolidated	**3,461**	**3,299**	**162**	**3,046**	**2,877**	**169**	**2,811**	**2,811**	**0**

2.1 Financial Performance - Provider Arm

Provider Clinical Services

The Provider Clinical services result for the three months ended 30 September 2015 is $2.704m unfavourable to budget. This is attributed to unfavourable performance in Child Women and Family services $518k, Medicine and Health of Older People services $1.707m, Surgical and Ambulatory Services $1.017m offset by favourable performance in Elective Services Centre $72k and Mental Health services $467k. The key drivers for services financial performance are summarised below.

Medicine and Health of Older People

The service is $1,708k unfavourable for the three months ended 30 September 2015. The major contributor to this overspend is the increased occupancy and bed demand in medical wards and increased Emergency Department presentations. Medicine and Health of Older People has been particularly busy, with ED presentations at 107% of contract and Acute General Medical at 108% of contract for September. High actual spend above budget has been contributed to by greater than expected demand for PCT drugs, staff being required to do additional shifts to cover high ED presentations, high winter sick days requiring backfilling and leave accrued in excess of leave taken.

Surgical & Ambulatory Services

The YTD result is $1.017m unfavourable. Key drivers to the result included ACC revenue below budget due to additional patients seen at ESC, annual leave accrued at a level higher than leave taken, offset by vacancies, unmet savings and high than budgeted depreciation charges and clinical supply costs relating to the prior financial year.

Elective Service Centre
The service is on budget ($72k favourable to budget YTD). This has been contributed to by ACC income being higher than planned (YTD impact $83k favourable).

Child Women & Family Services
The Service is overspent by $519k year to date. This is due to unmet savings initiatives $366k, ongoing outsourcing of postnatal services $60k, unplanned repairs and maintenance on transportable dental units and increased dental supply costs.

Mental Health Services
The variance for the first quarter is $467k This has resulted primarily from new revenue and the impact of high vacancies in nursing staff which are under active recruitment. This is partially negated by continuing high overtime and penal costs for Nursing. Savings initiatives have reduced the overtime unfavourable variance to budget each month since July. Overtime is largely required to meet the unpredictability of high patient acuity, in particular in the Forensics inpatient units, and some vacancies. Increased staffing has been required to address patient, staff and community safety issues in Adult Mental Health inpatient units Waiatarau and He Puna Waiora.

Corporate & Support Services
The overall result for Provider Support is $468k unfavourable for the year to date.

Revenue is favourable to budget by $2.144m, mainly due to additional revenue received of $756k for outsourced colonoscopies (offset by unbudgeted outsourced costs) and deficit support of $967k. Interest receivable and financing costs are $195k favourable for the year to date due to higher than anticipated cash deposits and a delay in drawing funds for major projects. These are offset by underspends in Personnel costs as a result of vacancies $523k offset by unbudgeted repairs and maintenance $245k, outsourced colonoscopies $756k and centrally budgeted savings.

2.2 Financial Performance - Funder

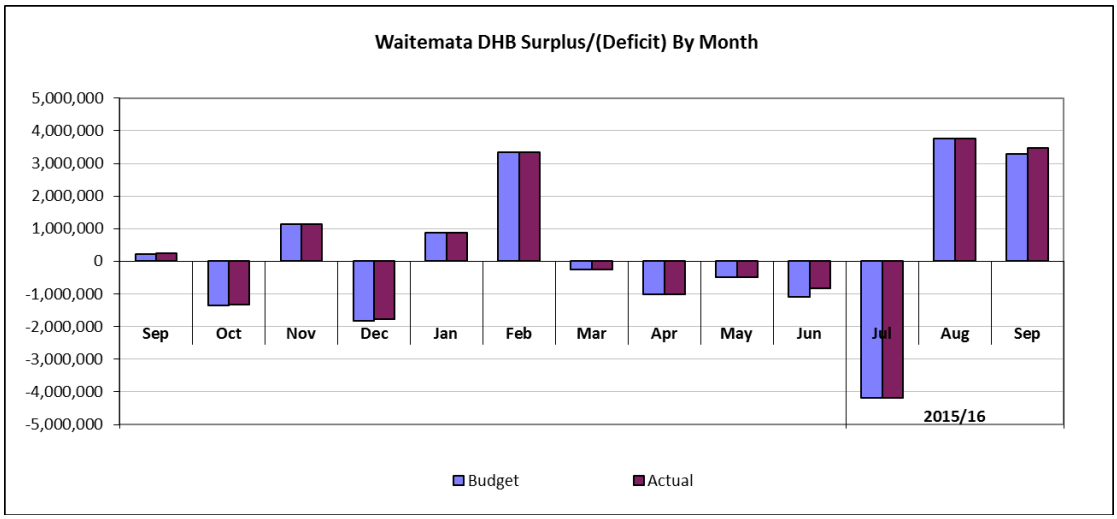
The Funder as reported in the Financial Performance by DHB Arm table represents the totality of the Funder and is inclusive of Funder Own Provider Arm Services, Funder NGO Services and Funder IDF Services. The Funder Net Core Net Result is $2.8m favourable to budget for the month and $3.3m favourable for the year to date. The two main components of the $3.3m year to date variance are $5.4m favourable relating to Funder NGO and IDF Services and $2.1m adverse relating to Provider Arm Services. The $5.4m favourable variance has been previously explained in the commentary relating to Funder Provider Payments. The $2.1m net adverse variance relates to the Provider Arm position in Funder books and is a consequence of a $756k revenue allocation in August to fund outsourced endoscopies and a $967k revenue allocation in September that was additional to budget.

2.3 Financial Performance - Governance and Funding Administration Arm

The Governance and Funding Administration (GFA) represents the Waitemata DHB share of the Joint Planning Funding and Outcomes Arm and includes the Waitemata DHB share of the Northern Regional Alliance. The GFA Core Net Result is $37k favourable to budget for the year to date.

3.1 Net Result

The actual net result performance against the budget for the DHB tracked over time is illustrated in the graph below. The overall DHB result for the quarter to 30 September 2015 is $3,046k which is $169k ahead of budget. The current full year forecast remains on budget at $2,811k.



3.3 Business Transformation Savings

The 2015/16 financial plan includes business transformation savings of $4.150M. The savings plan is on track as summarised in the table below:

KEY ACTIONS - with brief description*	Full Year Plan FY14/15	Year to Date Sept-15 Actual	Plan	Variance	Commentary on / Explanation of Variance
Service Reconfigurations					
Regional Dental Service Reconfiguration	510	0	128	(128)	Timing variance, invoicing arrangements are still being worked through for services delivered in first quarter
Standardisation of Clinical Supplies - Renal Fluids	540	135	135	0	Savings are on track year to date.
Standardisation of Clinical Supplies - Respiratory	50	12	12	0	Savings are on track year to date.
Standardisation of Clinical Supplies - Clinical Supplies Management	50	12	12	0	Savings are on track year to date.
Standardisation of Clinical Supplies - Food service contract	250	45	62	(17)	The contract was delayed until August, savings are anticipated for the remainder of the year.
Standardisation of Clinical Supplies - Gastro supplies	0	0	0	0	Savings are on track year to date.
Standardisation of Clinical Supplies - Gastro chemicals	30	0	8	(8)	Savings are anticipated from Q2
Standardisation of Clinical Supplies - Dental Suppplies	130	26	32	(6)	Savings are a little lower than anticipated due to some more costly items being required.
Investment in Revenue Generation - Child Rehab - ACC Funding / Referrals	100	25	25	0	Savings are on track year to date.
Review and rationalisation of facilities - Rental space in Mental Health	166	41	41	0	Savings are on track year to date.
Review and rationalisation of facilities - Opthalmology facilities at Waitakere to accomodate additional volumes	175	44	44	0	Savings are on track year to date.
Review of staffing rosters and models of care	50	12	12	(0)	Savings are on track year to date.
Pharmaceuticals - Cost management	1,100	0	0	0	Savings are on track year to date.
Banking and finance - Treasury management	1,000	250	250	0	Savings are on track year to date.
Total	**4,150**	**604**	**762**	**(159)**	

The overall financial performance of WDHB is $4k favourable for the month.

4 Capital Expenditure

Capital expenditure planned for the 2015/16 year is $85.652M. The table below summarises performance against the capital expenditure budget for the month and for the year. The detailed capital expenditure statement is attached to this report (**Attachment 2**).

$'000s	Full Year Budget	Month (Sep-15)			YTD (Sep-15)		
		Actual	Budget	Variance	Actual	Budget	Variance
Land	5,000	0	0	0	0	5,000	(5,000)
Buildings & Plant	48,954	2,395	2,217	178	8,656	17,814	(9,158)
Clinical Equipment	10,021	148	1,164	(1,016)	2,462	2,651	(189)
Other Equipment	3,850	75	321	(246)	264	963	(699)
Information Technology	12,819	121	1,068	(947)	271	3,204	(2,933)
Motor Vehicles	1,678	0	140	(140)	341	420	(79)
Purchase of softw are	3,330	0	0	0	0	0	0
Total Capital Expenditure	**85,652**	**2,739**	**4,910**	**(2,171)**	**11,994**	**30,052**	**(18,058)**

As at September 2015, capital expenditure is $18.058m below the plan:

- The underspend largely relates to delayed settlement of the purchase of 44 Taharoto Road/9 Karaka Street. Settlement for this property was completed on 7 October 2015.
- Underspend in Information Technology is due in part to resourcing issues.

Progress on implementation of major facilities capital projects is reported monthly to the Audit and Finance Committee via the Facilities and Development report. There are no significant departures from the plan; the underspend solely reflects the timing of the completion of projects.

5 Financial Position

The financial position as at 30 September 2015 is shown below. This indicates a strong balance sheet, with net worth of $296.368m including $138m in cash and deposits. The favourable equity position to budget was due to the increase in property valuation ($54m) in June 2015 following detailed valuations. The detailed Statement of Financial Position for the DHB Parent is provided as **Attachment 3.**

In $'000s	Opening 30 Jun-15	Sep-15 Actual	Sep-15 Budget	Sep-15 Variance	Full Year Budget
Crown Equity	**293,323**	**296,338**	**238,897**	**57,441**	**238,897**
Represented by :					
Current Assets	187,338	181,959	141,544	40,415	104,177
Current Liabilities	277,160	288,019	252,086	(35,933)	252,051
Net Working Capital	(89,822)	(106,060)	(110,542)	4,482	(147,874)
Fixed Assets	668,734	683,027	651,334	31,693	688,900
Term Liabilities	285,589	280,599	301,895	21,296	302,129
Total Employment of Capital	**293,323**	**296,368**	**238,897**	**57,471**	**238,897**

6 Cashflow Statement

Summary of the cashflow statement as at 30 September 2015 is shown below. The detailed Cashflow statement is provided as **Attachment 4**.

$'000s	Month			YTD		
	Actual	Budget	Variance	Actual	Budget	Variance
Opening cash	0	100,517	(100,517)	0	121,385	(121,385)
Operating	(2,376)	2,137	(4,513)	1,671	6,411	(4,740)
Investing	(20,739)	(4,910)	(15,829)	(29,993)	(30,052)	59
Financing	23,115	0	23,115	28,322	0	28,322
Closing cash	0	97,744	2,773	0	97,744	23,641
Closing Cash Balance in HBL Sweep account	115,072	0		115,072		

The DHB's cash position in the HBL sweep as at 30 September 2015 is $115.072m (Last month $138.186m). In this period $18M has been invested in term deposits, outside of the HBL sweep.

The DHB also monitors performance in collecting amounts owed by other organisations; the total amount owed to the DHB as at 30 September 2015 was $13.347M (last month balance owed was $12.631m). 67% of this is within the 60 days period (54% of this relates to Ministry of Health and 15% to other DHBs). 33%

is over 60 days and the majority of this is in the area most difficult to collect, i.e. non-residents income. An Accounts Receivables report and explanation for amounts overdue for more than 60 days is provided as **Attachment 5**.

7 Treasury

7.1 Financing Activity

Term debt drawn and average interest expense and rates are shown in the Tables below.

Month	Term Debt ($'000s)	CHFA Interest Expense ($'000s)
Jul-15	276,706	909
Aug-15	276,706	909
Sep-15	276,706	879
YTD	**276,706**	**2,697**

$276.706m of Crown debt was fully drawn as at 30 September 2015. All loan facilities have been drawn down as at 30 September 2015.

The average interest rates on the loan portfolio are provided in the table below:

NZD	Available Facilities $000	Drawn Debt Current Month $000	Drawn Debt Last Month $000	Interest Rate Current Month	Interest Rate Last Month
CHFA Fixed	$272,996	$272,996	$272,996	3.8766%	3.9197%
CHFA Floating	$3,710	$3,710	$3,710	3.1844%	3.5843%
Total Facilities	**$276,706**	**$276,706**	**$276,706**	**3.8673%**	**3.9149%**
Monthly Weighted Average Interest Cost (Including Hedges & Margin)				**3.8673%**	**3.9149%**

7.2 Treasury Policy

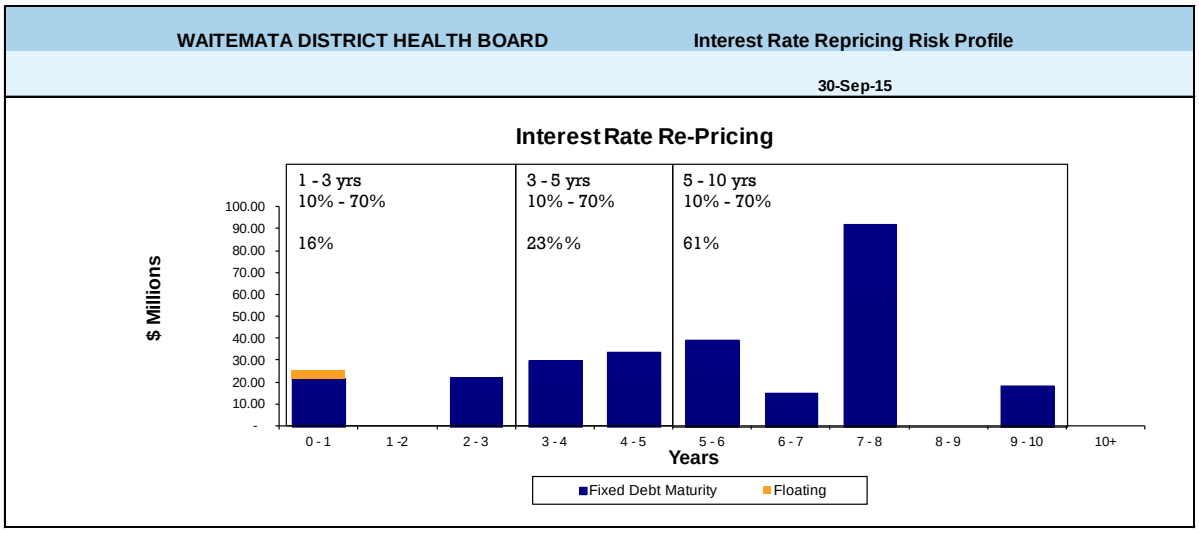
- All WDHB debt shall be borrowed on either a fixed interest rate or floating interest rate basis, subject to the requirement that the overall percentage of fixed (fixed/floating master limit) in any time bucket must be in accordance with the following limits:

Master fixed/floating risk control limit		
Minimum fixed rate	**Mid-point**	**Maximum fixed rate**
60%	80%	100%

The fixed rate amount at month-end reporting dates must be within the following maturity bands (percentages calculated on the fixed rate amount at month end):

Fixed rate maturity profile			
Period	**Minimum fixing**	**Mid-point**	**Maximum fixing**
0 - 3 years	10%	40%	70%
3 - 5 years	10%	40%	70%
5 years plus	10%	40%	70%

The interest rate repricing risk profile for the WDHB Crown debt is shown in the graph below:



7.3 Financial Covenants

WDHB's performance against financial covenants (which are currently waived) is summarised below and compliance was achieved.

Financial Covenants	Actual	Budget	Covenant Met
Shareholders' Funds (=> $70 million)	296 million	239 million	Yes
Net Total Debt / (Net Total Debt + Shareholders' Funds) < 65%	51%	56%	Yes
Interest Cover EBITDA / Net Interest (> 2.5:1)	4 times	3 times	Yes

Attachment 1
WAITEMATA DISTRICT HEALTH BOARD

30 September 2015

STATEMENT OF FINANCIAL PERFORMANCE BY DHB SERVICE GROUP

MONTH	Direct Revenue			Direct Expenditure			Contribution			Net Result		
($000's)	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Provider												
Medical Services	1,022	971	51	17,500	16,766	(734)	(16,478)	(15,795)	(683)	(16,478)	(15,795)	(683)
Surgical Services	1,485	1,413	73	13,954	13,290	(663)	(12,468)	(11,878)	(591)	(12,468)	(11,878)	(591)
ESC	72	50	22	2,172	1,993	(179)	(2,100)	(1,943)	(157)	(2,100)	(1,943)	(157)
Child, Women & Family Services	1,319	1,128	191	6,907	6,701	(206)	(5,588)	(5,573)	(15)	(5,588)	(5,573)	(15)
Mental Health	1,026	994	32	9,642	9,746	103	(8,616)	(8,752)	135	(8,616)	(8,752)	135
Sub Total - Clinical Services	**4,924**	**4,556**	**369**	**50,176**	**48,497**	**(1,679)**	**(45,251)**	**(43,941)**	**(1,310)**	**(45,251)**	**(43,941)**	**(1,310)**
Hospital Operations	598	656	(59)	5,494	5,419	(76)	(4,897)	(4,762)	(134)	(4,897)	(4,762)	(134)
Facilities	60	51	9	2,874	2,355	(518)	(2,814)	(2,305)	(509)	(2,814)	(2,305)	(509)
Provider Management	61,781	61,413	368	126	(899)	(1,024)	61,655	62,312	(657)	61,655	62,312	(657)
Corporate	1,337	1,290	48	9,534	9,445	(89)	(8,197)	(8,156)	(41)	(8,197)	(8,156)	(41)
Sub Total - Corporate & Support Services	**63,776**	**63,410**	**366**	**18,028**	**16,321**	**(1,707)**	**45,748**	**47,089**	**(1,341)**	**45,748**	**47,089**	**(1,341)**
Total Provider	**68,700**	**67,965**	**735**	**68,203**	**64,817**	**(3,386)**	**497**	**3,148**	**(2,651)**	**497**	**3,148**	**(2,651)**
Governance & Funding Administration	**1,047**	**998**	**50**	**1,047**	**998**	**(50)**	**0**	**(0)**	**0**	**0**	**(0)**	**0**
Funder Arm												
Funder NGOs	38,247	38,702	(455)	36,365	38,551	2,186	1,882	151	1,731	1,882	151	1,731
Funder Inter District Flows	22,731	22,421	310	21,649	22,421	772	1,082	0	1,082	1,082	0	1,082
Total Funder Arm	**60,978**	**61,123**	**(145)**	**58,014**	**60,972**	**2,958**	**2,964**	**151**	**2,813**	**2,964**	**151**	**2,813**
Consolidated	**130,726**	**130,086**	**639**	**127,265**	**126,787**	**(478)**	**3,461**	**3,299**	**162**	**3,461**	**3,299**	**162**

YEAR TO DATE	Direct Revenue			Direct Expenditure			Contribution			Net Result		
($000's)	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
Provider												
Medical Services	3,379	2,912	467	55,052	52,878	(2,174)	(51,673)	(49,966)	(1,708)	(51,673)	(49,966)	(1,708)
Surgical Services	4,317	4,316	1	42,714	41,696	(1,018)	(38,397)	(37,380)	(1,017)	(38,397)	(37,380)	(1,017)
ESC	233	150	83	6,182	6,170	(11)	(5,948)	(6,020)	72	(5,948)	(6,020)	72
Child, Women & Family Services	3,624	3,451	173	21,357	20,666	(692)	(17,734)	(17,215)	(518)	(17,734)	(17,215)	(518)
Mental Health	3,295	2,982	313	31,033	31,188	154	(27,738)	(28,205)	467	(27,738)	(28,205)	467
Sub Total - Clinical Services	**14,848**	**13,811**	**1,037**	**156,339**	**152,597**	**(3,741)**	**(141,490)**	**(138,786)**	**(2,704)**	**(141,490)**	**(138,786)**	**(2,704)**
Hospital Operations	1,886	1,887	(1)	16,844	16,169	(675)	(14,958)	(14,282)	(676)	(14,958)	(14,282)	(676)
Facilities	165	152	13	8,296	7,156	(1,140)	(8,132)	(7,005)	(1,127)	(8,132)	(7,005)	(1,127)
Provider Management	187,364	184,239	3,125	471	(2,690)	(3,161)	186,893	186,929	(36)	186,893	186,929	(36)
Corporate	3,082	4,076	(994)	26,143	28,508	2,365	(23,060)	(24,432)	1,371	(23,060)	(24,432)	1,371
Sub Total - Corporate & Support Services	**192,497**	**190,354**	**2,143**	**51,754**	**49,144**	**(2,610)**	**140,743**	**141,211**	**(468)**	**140,743**	**141,211**	**(468)**
Total Provider	**207,346**	**204,166**	**3,180**	**208,093**	**201,741**	**(6,352)**	**(747)**	**2,425**	**(3,172)**	**(747)**	**2,425**	**(3,172)**
Governance & Funding Administration	**3,171**	**2,993**	**178**	**3,134**	**2,993**	**(141)**	**37**	**(0)**	**37**	**37**	**(0)**	**37**
Funder Arm												
Funder NGOs	113,871	116,106	(2,235)	110,116	115,653	5,537	3,755	453	3,302	3,755	453	3,302
Funder Inter District Flows	67,613	67,264	350	67,611	67,264	(348)	2	0	2	2	0	2
Total Funder Arm	**181,484**	**183,369**	**(1,885)**	**177,727**	**182,916**	**5,189**	**3,757**	**453**	**3,304**	**3,757**	**453**	**3,304**
Consolidated	**392,000**	**390,528**	**1,472**	**388,954**	**387,650**	**(1,304)**	**3,046**	**2,877**	**169**	**3,046**	**2,877**	**169**

Attachment 2

WAITEMATA DISTRICT HEALTH BOARD

STATEMENT OF CAPITAL EXPENDITURE

For 3 Month Ended 30 September 2015

Service	Net Budget ex Prior Years	Budget 2015/16	$ Spent 2015/16	Balance Budget Unspent
Corporate Services				
Building	7,504,703	7,031,484	181,096	**14,355,092**
Clinical Equipment	442,885	43,998	111,510	**375,373**
Information Technology	2,451,620	2,999,008	42,836	**5,407,791**
Motor Vehicles	0	0	0	**0**
Other Equipment	1,221,753	5,214,224	87,456	**6,348,520**
Corporate Contingency	609,854	3,080,000		**3,689,854**
	12,230,815	**18,368,714**	**422,898**	**30,176,630**
Elective Surgery Centre				
Building	11,204	4,938	3,940	**12,202**
Clinical Equipment	249,456	292,062	240,641	**300,878**
Information Technology	1,621	0	1,599	**22**
Motor Vehicles	0	0	0	**0**
Other Equipment	0	0	0	**0**
Contingency	0	0		**0**
	262,281	297,000	246,179	**313,102**
Decision Support				
Building	23,460	0	2,150	**21,310**
Clinical Equipment	0	0	0	**0**
Information Technology	1,989,353	9,653,845	184,329	**11,458,870**
Motor Vehicles	0	0	0	**0**
Other Equipment	0	0	0	**0**
Contingency	0	0		0
	2,012,813	**9,653,845**	**186,479**	**11,480,180**
Facilities				
Mason Clinic Remedials - $7,368,380	2,758,799	500,000	68,093	**3,190,706**
Waitakere ED - $9,801,000	4,441,238	0	987,786	**3,453,452**
Waitakere ED mental health & emerging disease - $2.941m	941,000	2,000,000	0	**2,941,000**
Awhina - $9,840,000	45,208	0	0	**45,208**
Mason Clinic 15 Bed Unit - $9,800,000	4,800,105	4,900,000	170,713	**9,529,392**
WTH Maternity - Redesign - $1,087,000	(744,348)	887,000	77,219	**65,432**
Level 3 Dept of Med - $2,219,000	1,096,737	1,119,000	132,393	**2,083,344**
Theatres - $6,107,000	3,766,971	7,178,645	911,972	**10,033,644**
Bridge to ESC - $5,316,000	6,800	5,300,000	76,157	**5,230,643**
Discharge lounge - $1,580,000	373,178	1,080,000	616,327	**836,851**
Building - Other	25,275,429	39,274,438	5,385,208	**59,164,659**
Clinical Equipment	271,721	78,300	36,696	**313,326**
Information Technology	0	0	0	**0**
Motor Vehicles	0	0	0	**0**
Other Equipment	3,076	0	2,796	**280**
Contingency	27,088	0		**27,088**
	43,063,003	**62,317,383**	**8,465,360**	**96,915,026**
Hospital Operations				
Building	36,586	1,429,299	13,363	**1,452,523**
Clinical Equipment	2,367,309	1,141,216	446,147	**3,062,378**
Information Technology	4,447,755	319,768	42,146	**4,725,377**
Motor Vehicles	365,149	3,173,000	340,776	**3,197,374**
Other Equipment	351,147	793,076	136,559	**1,007,664**
Contingency	4,560	0		**4,560**
	7,572,506	**6,856,359**	**978,990**	**13,449,875**
Mental Health Services				
Building	20,907	370,462	0	**391,369**
Clinical Equipment	17,239	75,000	-8,975	**101,214**
Information Technology	0	0	0	**0**
Motor Vehicles	305	56,562	0	**56,867**
Other Equipment	78,461	0	4,953	**73,507**
Contingency	37,064	0		**37,064**
	153,977	**502,024**	**-4,022**	660,022
Medical & Health of Older People Services				
Building	24,530	0	15,539	**8,990**
Clinical Equipment	1,067,332	827,713	179,452	**1,715,593**
Information Technology	53,646	15,000	0	**68,646**
Motor Vehicles	0	0	0	**0**
Other Equipment	7,175	0	4,563	**2,612**
Contingency	196,861	0		**196,861**
	1,349,544	**842,713**	**199,554**	1,992,702
Surgical and Ambulatory				
Building	5,572	0	0	**5,572**
Clinical Equipment	1,969,817	4,565,704	1,366,330	**5,169,191**
Information Technology	0	0	0	**0**
Motor Vehicles	0	0	0	**0**
Other Equipment	6,615	1,430	0	**8,045**
Contingency	0	0		**0**
	1,982,005	**4,567,134**	**1,366,330**	5,182,809
Child, Woman & Family				
Building	1,035,331	0	14,389	**1,020,942**
Clinical Equipment	626,532	1,178,393	90,501	**1,714,423**
Information Technology	81,000	0	0	**81,000**
Motor Vehicles	6,703	0	0	**6,703**
Other Equipment	12,895	40,488	27,215	**26,168**
Contingency	2,951	0		**2,951**
	1,765,412	**1,218,881**	**132,106**	2,852,187
Grand Total	**70,392,355**	**104,624,053**	**11,993,875**	**163,022,533**

Attachment 3

WAITEMATA DISTRICT HEALTH BOARD | **Reporting Date** | **30 September 2015**

STATEMENT OF FINANCIAL POSITION ($'000s)

30/06/2015 Actual		Actual	Budget	30/06/2016 Budget
	Crown Equity			
103,015	Crown Equity	103,015	103,015	103,015
244,156	Revaluation Reserve	244,155	190,246	190,246
(55,364)	Retained Earnings - Prior Years	(53,848)	(54,364)	(54,364)
1,516	Retained Earnings - 2014/15	3,046		
293,323		**296,368**	**238,897**	**238,897**
	Represented by :			
	Current Assets			
143,393	Bank and Short Term Deposits	121,071	101,044	63,677
37,240	Debtors	52,579	34,300	34,300
335	Prepayments	1,987	500	500
6,370	Inventory	6,322	5,700	5,700
	Assets Held for Resale			
187,338		**181,959**	**141,544**	**104,177**
	Current Liabilities			
	Bank Overdraft			
111,969	Creditors	144,370	127,770	125,930
25,344	Provisions and Accruals	52,074	47,690	47,690
113,798	Staff Related Liabilities	65,526	72,601	74,464
26,049	Term Debt - Current Portion	26,049	4,025	3,967
277,160		**288,019**	**252,086**	**252,051**
(89,822)	**Net Working Capital**	(106,060)	(110,542)	(147,874)
	Fixed Assets			
559,060	Land, Buildings and Plant (net)	562,998	527,221	546,553
3,800	Leasehold Building Works (net)	3,220	3,337	3,337
50,545	Equipment (net)	42,248	40,462	45,242
95	Information Technology (net)	87	2,996	12,035
5,113	Intangible Software (net)	251	5,798	6,903
3,448	Vehicles (net)	3,410	3,316	6,075
20,818	Work in Progress	24,455	32,000	31,426
642,878		**636,670**	**615,130**	**651,571**
25,855	**LT & Investments in Associates**	46,356	36,204	37,329
25,855		**46,356**	**36,204**	**37,329**
	Term Liabilities			
33,741	Staff Related Liabilities	28,400	20,000	21,500
	Trust and Special Funds	435	8,503	8,503
251,848	Term Debt - External	251,764	273,392	272,126
285,589		**280,599**	**301,895**	**302,129**
293,323		**296,368**	**238,897**	**238,897**

Attachment 4

WAITEMATA DISTRICT HEALTH BOARD **Reporting Date** **30 September 2015**

CASHFLOW STATEMENT ($'000s)

	Month			YTD		
	Actual	**Budget**	**Variance**	**Actual**	**Budget**	**Variance**
Cash flows from operating activities:						
Inflows						
Crown	123,289	126,205	(2,916)	386,773	378,615	8,158
Interest Received	243	501	(258)	1,730	1,503	227
Other Revenue	4,534	2,665	1,869	12,711	7,995	4,716
Outflows						
Staff	47,874	47,194	(680)	145,752	141,582	(4,170)
Suppliers	20,799	16,122	(4,677)	64,705	48,366	(16,339)
Other Providers	61,180	60,630	(550)	188,251	181,890	(6,361)
Capital Charge	0	1,583	1,583	0	4,749	4,749
Interest Paid	431	1,155	724	431	3,465	3,034
GST (net)	158	550	392	404	1,650	1,246
Net cash from Operations	**(2,376)**	**2,137**	**(4,513)**	**1,671**	**6,411**	**(4,740)**
Cash flows from investing activities:						
Inflows						
Sale of Fixed Assets	0		0	0		0
Associates	0		0	0		0
Outflows						
Capital Expenditure	2,739	4,910	2,171	11,993	30,052	18,059
Investments	18,000	0	(18,000)	18,000	0	(18,000)
Net cash from Investing	**(20,739)**	**(4,910)**	**(15,829)**	**(29,993)**	**(30,052)**	**59**
Cash flows from financing activities:						
Inflows						
Equity Injections	0	0	0	0	0	0
New Debt	0	0	0	0	0	0
Deposits Recovered	0	0	0	0	0	0
Outflows						
Debt Repayments	0	0	0	0	0	0
Funds to Deposit	(23,115)	0	23,115	(28,322)	0	28,322
Net cash from Financing	**23,115**	**0**	**23,115**	**28,322**	**0**	**28,322**
Net increase / (decrease)	**0**	**(2,773)**		**0**	**(23,641)**	
Opening cash	0	100,517		0	121,385	
Closing cash	**0**	**97,744**		**0**	**97,744**	
Closing Cash Balance in HBL Sweep account	115,072			115,072		

WAITEMATA DISTRICT HEALTH BOARD								Reporting Date	30 September 2015
STATEMENT OF ACCOUNTS RECEIVABLES									
Ref		As %	Total Outstanding	Current	1 - 30 D	31 - 60 D	61 - 90 D	91 Days +	Prior Month
1	ACC	2.6%	346,993	324,632	2,366	7,147	6,890	5,959	508,822
2	Accredited Employers	0.0%	3,749	20	3,897	0	20	-188	5,269
3	Commercial	8.8%	1,177,787	583,384	322,626	147,110	3,213	121,454	994,494
4	Crown (excluding MoH)	5.4%	725,001	511,610	50,438	118,883	38,258	5,812	650,577
5	DHBS'	14.1%	1,875,867	973,066	176,553	170,675	95,774	459,799	2,456,349
6	MOH	43.7%	5,836,114	3,163,002	828,780	853,928	511,885	478,519	4,607,209
7	Non Residents	25.1%	3,351,349	30,832	280,703	350,337	209,045	2,480,432	3,376,311
8	Overseas Govt	0.0%	0	0	0	0	0	0	0
9	Patient	0.2%	28,580	7,350	14,122	776	1,733	4,598	30,180
10	Staff	0.0%	1,868	0	0	1,148	762	-42	2,033
	WDHB Total		**13,347,308**	**5,593,895**	**1,679,485**	**1,650,004**	**867,580**	**3,556,343**	**12,631,244**
				42%	13%	12%	7%	27%	

Ref	
1	**ACC** - 94% of the balance remains current, reflecting an improved billing process.
3	**Commercial -** The $112k in the 91 Days + category is being worked with collections.
4	**Crown** - 94% is less than 60 days outstanding.
5	**DHB's** - The $344k in the 91 day + category includes CMDHB invoices under dispute. These are being followed up with the services and CFO for resolution
6	**MOH** - Of the old balances some balances have been paid. Remainder is being followed up.
7	***Non Residents*** *- $ 1,842,555 of debt (55%) are on a current payment plan. This category of debtors is the most difficult to collect from. Clients who break two consecutive scheduled payments are referred to Baycorp.*

7.1 Hospital Advisory Committee Meeting held on 23rd September 2015

Recommendation:

That the draft minutes of the Hospital Advisory Committee Meeting held on 23rd September 2015 be received.

Minutes of the meeting of the Waitemata District Health Board

Hospital Advisory Committee

Wednesday 23 September 2015

Held at Waitemata District Health Board Boardroom, Level 1, 15 Shea Terrace, Takapuna, commencing at 10.03a.m.

PART I – Items considered in public meeting

COMMITTEE MEMBERS PRESENT

Sandra Coney (Acting Committee Chair)
Max Abbott
Warren Flaunty (from 10.23am)
Tony Norman
Morris Pita
Christine Rankin
Allison Roe
Gwen Tepania-Palmer
Willem Landman (co-opted member)
Donna Riddell (co-opted member)

ALSO PRESENT Dale Bramley (Chief Executive)
Robert Paine (Chief Financial Officer and Head of Corporate Services)
Andrew Brant (Chief Medical Officer
Cath Cronin (Director of Hospital Services)
Fiona McCarthy (Director of Human Resources)
Penny Andrew (Clinical Leader Quality) (until 11.14am)
Jenny Parr(Acting Director of Allied Health)
Debbie Eastwood (GM Medicine and Health of Older People)
Jonathan Christiansen (Head of Department, Medical)
Peta Molloy (Acting Board Secretary)
(Staff members who attended for a particular item are named at the start of the minute for that item.)

PUBLIC AND MEDIA REPRESENTATIVES

Lynda Williams (Auckland Womens Health Council) (from 10.05am)

APOLOGIES **Resolution** (Moved Sandra Coney/Seconded Gwen Tepania-Palmer)

Apologies were received and accepted from Lester Levy, James Le Fevre, Susanna Galea and Joanne Brown. Apologies for late arrival were received from Warren Flaunty, Allison Roe and Tony Norman.

Carried

WELCOME The Acting Committee Chair welcomed those present.

DISCLOSURE OF INTERESTS

There were no declarations of interest relating to the open section of the agenda.

1. AGENDA ORDER AND TIMING

Items were taken in the same order as listed in the agenda. The public excluded session was held first, from 09.15a.m until 09.37a.m.

2. RESOLUTION TO EXCLUDE THE PUBLIC (agenda page 7)

Resolution (Moved Sandra Coney/Seconded Willem Landman)

That, in accordance with the provisions of Schedule 3, Sections 32 and 33, of the NZ Public Health and Disability Act 2000:

The public now be excluded from the meeting for consideration of the following items, for the reasons and grounds set out below:

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
1. Confirmation of Public Excluded Minutes – Hospital Advisory Committee Meeting of 12/08/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982 [NZPH&D Act 2000, Schedule 3, S.32 a]	**Confirmation of Minutes** As per resolution(s) to exclude the public from the open section of the minutes of that meeting, in terms of the NZPH&D Act.
2. Quality Report	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000, Schedule 3, S.32 a]	**Privacy** The disclosure of information would not be in the public interest because of the greater need to protect the privacy of natural persons, including that of deceased natural persons. [Official Information Act 1982 S.9 (2) (a)]
3. HR Update Report	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Privacy** The disclosure of information would not be in the public interest because of the greater need to protect the privacy of natural persons, including that of deceased natural persons. [Official Information Act 1982 S.9 (2) (a)] **Negotiations** The disclosure of information would not be in the public interest because of the greater

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
		need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]

Carried

09.15a.m to 09.37a.m – public excluded session.

9.37am to 10.03am – meeting adjourned.

10.03a.m – the Committee resumed in open session.

3. COMMITTEE MINUTES

3.1 Confirmation of the Minutes of the Meeting of the Hospital Advisory Committee held on 12th August 2015 (agenda pages 8-17)

Resolution (Moved Gwen Tepania-Palmer/Seconded Donna Riddell)

That the minutes of the meeting of the Hospital Advisory Committee held on 12th August 2015 be approved.

Carried

Actions Arising (agenda page 18)

It was noted that the 'organ donation' presentation has been deferred to the meeting scheduled on 04th November 2015.

4. ITEMS FOR CONSIDERATION AND RECOMMENDATION TO THE BOARD

There were no decision items.

5. PROVIDER ARM PERFORMANCE REPORT

5.1 Provider Arm Performance Report – July 2015 (agenda pages 19-73)

Executive Summary/Overview/Scorecard

Cath Cronin (Director of Hospital Services) and Robert Paine (Chief Financial Officer and Head of Corporate Services) introduced the report.

Matters highlighted or updated by Cath Cronin Included:

- That the 'Outpatient Intravenous Antibiotic Service' programme had commenced with up to 20 patients now being managed in their own homes. It has been a successful initiative with positive feedback received from the patients participating.
- It was noted that meeting the ED target over the winter period had been challenging due to unusually high patient presentations, staff on sick leave and staff vacancies. The work being undertaken by the staff over the winter period was acknowledged with Cath Cronin noting it has been a whole hospital response.
- Colonoscopy waiting times are steady and on track to achieve compliance by December 2015.
- The Faster Cancer Treatment programme is still working to target. The steering group is now meeting fortnightly to ensure the programme is on track and a programme model is in place to track all cancer patients.
- ESPI is on track and compliant within the Ministry of Health's acceptable target range, this compliance will be maintained. It was noted that there will not be a financial penalty for the first quarter and that the Ministry has acknowledged that the DHB bought the ESPI service back on track quickly.

Robert Paine summarised the financial results reported for the first month of the new financial year. He noted the reference to a significant increase in new patients receiving PCT drugs (pharmaceutical cancer treatment) and a continued high use of nursing watches. There was also a high level of annual leave taken over the July school holiday period.

Gwen Te Pania-Palmer acknowledged the incredibly hard work of all the staff over the winter period.

Human Resources

Fiona McCarthy (Director Human Resources) was present for this section of the report. Fiona noted the sick leave increase in July and that this was similar to same time in the previous year. Sick leave continues to be monitored.

Medicine and Health of Older Peoples Services

Debbie Eastwood (General Manager, Medicine and Health of Older Peoples Services), Dr Jonathan Christiansen (Head of Division Medical) and Shirley Ross (Head of Division Nursing) were present for this section of the report.

Matters highlighted or updated included:

- Jonathan Christensen noted that the presentation on 'organ donations' has been deferred to the next meeting.
- Shirley Ross noted the "In your Shoes" sessions held early in the year for MHOP and SAS nursing leadership in conjunction with Human Resources and the Quality Unit. The sessions were very successful and identified a need for additional training of front line staff, subsequently two half day workshop were recently been held and attended by 36 participants. There is still more to be done following the positive steps already taken.

Discussion and responses to questions about the increase in ED presentations and mitigating that increase included:

- ED presentations are tracking higher each year annually. This is being monitored, the DHB needs to provide the best systems possible and it is not always possible to change the communities approach to seeking care.
- Allison Roe noted that she had attended the LGNZ Conference where David Meates presented on the Canterbury model; it was noted that Waitemata DHB shares information with Canterbury (as with other DHBs) and caution must be taken with comparisons between the two DHBs as they have a different models of care.
- Dale Bramley noted that a large survey was undertaken on patients and families attending ED to gain an understanding of the reason for presenting in ED, the responses highlighted a number of reasons including the availability of GP care and the service received in ED.
- Willem Landman noted his conflict as a clinical Director and that he was not speaking about primary care perspectives. He noted that the situation of patients presenting to ED was not unique to Waitemata DHB or New Zealand. He expressed his concern that primary care may be targeted as the solution for issues, but that patients cannot access acute unscheduled care and there will be a capacity issue that will need to be addressed. For example, a parent's view of a child's illness is that of an emergency, an unwell child can be terrifying for a parent who is acting in good faith when presenting to an emergency department. However, a lot of paediatric emergency presentations such as bronchitis, fever or convulsions could be dealt with in primary care. Admission rates of self-presentation to an emergency department are traditionally very low.
- It was noted that discussions are being entered into around better managing primary care in emergency departments and how do to that in the most efficient and acceptable way possible.
- The emergency department does have a voucher system for patients to attend an A & M; vouchers are only provided if it is considered safe for the patient to go elsewhere.
- The Chief Executive noted that there was also a regional discussion with the Chief Executives and Chief Medical Officers around after-hours care and that the Board would be updated on this matter.
- In response to a query it was noted that there is no data available on the percentage of patients presenting with psychotic type disorders. Max Abbott noted the work being undertaken in primary care around mental health and the impact it has had on acute admission rates for Counties Manukau DHB.

<u>Child, Women and Family Services</u>

Dr Peter van de Weijer (Head of Division Medical) and Linda Harun (General Manager Child, Women and Family Services) presented this section of the report.

Matters highlighted included:

- That the MoH has received the annual Maternity Quality Service report and the feedback received was very positive.
- There is enthusiastic anticipation awaiting the new dedicated women's ward scheduled to open at the beginning of November 2015. Nursing staff are prepared for the new concept of working in a dedicated women's ward. The name of the new ward is yet to be decided, but will be confirmed prior to the official opening.

Matters covered in discussion and response to questions included:

- In response to a question about local birthing centres, it was noted that a report is being developed for the Board with financial details being finalised to provide clarity around any implications. All options need to be provided to the Board for feedback on options to be consulted on. It was noted that the future model of care is designed for women to stay in the facility where they gave birth, rather than transferring.
- The population growth anticipated in the Hupai/Kumeu over the next 10-15 years (along with projected growth in other areas of the Waitemata district) was raised and in response the Chief Executive noted that there is a report on the Board agenda regarding the health services plan. He also noted that he and Robert Paine, along with Ratana Walker (Contractor) would be meeting with the National Health Board and Statistics New Zealand to discuss the estimated population growth for the Waitemata district.
- It was noted that with regard to the pressure on the Child Protection Alert process (page 43 of the agenda) the internal paediatrics team was preparing a case to address this matter as some additional resource is required.
- It was noted that there had been a slight reduction in the caesarean rate (page 43 of the agenda) and that this rate had remained steady.
- The Chief Executive acknowledged the work of the Child Women and Family Service. He noted that he had recently presented the Health Hero award to Ann Smith at the Glen Eden Primary School, Ann graduated in 1960 and apart from a break when having children, has worked for the DHB continuously for 55 years. Ann has shown true dedication to the public health system and is held in very high regard by her colleagues. The Committee would send a letter to Ann expressing their appreciation of her service.

Mental Health and Addiction Services

Ian McKenzie (General Manager, Mental Health and Addictions Services), Alex Craig (Associate Director of Nursing Practice, Mental Health) and Helen Wood (Project Leader, Primary Mental Health) were present for this section of the report.

Helen Wood was welcomed back in her role as Project Leader for Primary Mental Health.

Matters highlighted or updated included:

- That the Mental Health Services Primary Care pilot commenced at the New Lynn Integrated Family Care Centre in 2014, with Dr Lyndy Matthews appointed (0.2FTE) along with clinical and project support (0.4FTE). An evaluation of the pilot is now being undertaken and this fits well with the project Helen Wood has been contracted to undertake.
- Helen Wood noted that the Chief Executive has requested a strategic five year action plan for primary and population approaches to mental health. It is planned to report to the Board in February 2016. The report will outline key areas around how to build the capability to get better outcomes for people who have limited access to intervention in primary care, GP, school based and other NGOs providing primary services. It was noted that approximately 80 per cent of patients presenting in primary care have some mental health component.

Matters covered in discussion and response to questions included:

- Morris Pita noted that the open Board agenda includes a Health & Safety update report which identifies a high proportion of physical aggression towards staff. This point was acknowledged and it was noted that developing an insight into the physical environment can lessen an aggressive situation of conflict or confrontation - engagement and environment can make a difference.
- Max Abbott commented on the high demand for inpatient beds reported (page 51 of the agenda). In response it was noted that there was a peak of demand and additional staff have been assigned at Waitakere and are in the process of being assigned at North Shore Hospital.

Elective Surgery Centre (ESC)

Mark Watson (Group Manager ESC) was present for this section of the report and an apology was conveyed from John Cullen. It was noted that the Centre continues to receive positive patient feedback.

Surgical and Ambulatory Services

Cath Cronin (Director of Hospital Services) was present for this section of the report. She introduced and welcomed Michelle Sunderland to her new role as General Manager of Surgical and Ambulatory Services.

Hospital Operations

Cath Cronin (Director of Hospital Services) summarised this section of the report. She noted that the implementation of the new foodservice system was a primary focus, with Leith Hart (Group Manager, Hospital Operations) and Roselyn Norrie (Food Services Manager) managing this implementation.

Facilities and Development

Robert Paine (Chief Financial Officer and Head of Corporate Services) summarised this section of the report. In response to a question, it was noted that the Waitakere ED redevelopment is in two parts with the new build scheduled to open June 2016 and the refurbishment of the existing section scheduled to be completed late 2016/early 2017.

Resolution (Moved Sandra Coney/Seconded Allison Roe)

That the report be received.

Carried

6. CORPORATE REPORTS

6.1 Clinical Leaders' Report (agenda pages 74-76)

Andrew Brant noted that the Medical Council Accreditation visit is scheduled on the 1st and 2nd October 2015 and that an update would be provided to the Committee at its next meeting.

Jenny Parr presented the Allied Health, Scientific and Technical Staff section of the report. She noted that it is hoped the appointment of the Director of Allied Health, Scientific and Technical role will be made in October 2015.

Jenny Parr also acknowledged the Committees comments on the contribution of the work staff are doing through the challenging winter period.

Resolution (Moved Gwen Tepania-Palmer/Seconded Tony Norman)

That the report be received.

Carried

6.2 Human Resources (agenda pages 77-84)

Fiona McCarthy (Director Human Resources) presented this report.

Matters covered in discussion or responses to questions included:

- That the professional development fund is allocated annually and that the first year has been successfully completed. In response to a query about accessing the funding, it was noted that each application is individually assessed and that the Committee can be provided with a report which shows the level rigour applied when reviewing and approving funding.
- In response to a query it was noted that Maori and Pacific nurses are supported as part of the scholarship programme. It was also noted that as part of the professional development fund, Vanessa Duthie (from a Maori perspective) and Bruce Levi (from a Pacific perspective) are on the selection panel.
- In response to a query, it was noted that all of the DHB's scholarship programmes are bonded.
- It was noted that there was a lot of activity to attract ethnic diversity into the health workforce, with a particular programme in place for Maori and Pacific. Max Abbott noted the collaborative work being undertaken across all three metro-Auckland DHBs, the Universities and Polytechnics. He noted that AUT had transferred its midwifery programme from its North Shore campus to Manukau; this has assisted in increasing Maori and Pacific students to the programme. In regard to the programme for Maori and Pacific healthcare assistants, Donna Riddell noted that part of her commitment as a Charge Nurse Manager is to take the healthcare assistants on to the wards as much as possible and work with them to look at future employment opportunities from a professional perspective.

Resolution (Moved Willem Landman/Seconded Tony Norman)

That the report be received.

Carried

The Acting Committee Chair thanked those present.

The meeting concluded at 11.38a.m.

SIGNED AS A CORRECT RECORD OF THE WAITEMATA DISTRICT HEALTH BOARD HOSPITAL ADVISORY COMMITTEE MEETING OF 23 SEPTEMBER 2015

_____ ACTING COMMITTEE CHAIR

7.2 Auckland DHB and Waitemata DHB Community and Public Health Advisory Committees Meeting 14th October 2015

Recommendation:

That the draft minutes of the Community and Public Health Advisory Committee meeting held on 14th October 2015 be received.

Note: There is a recommendation to the Auckland and Waitemata DHB Boards under Item 4.3, however additional background information for considering this will be available by the time of the 16 December Board meeting and it is recommended therefore that it be considered at that meeting.

Minutes of the meeting of the Auckland DHB and Waitemata DHB

Community and Public Health Advisory Committees

Wednesday 14 October 2015

held at Waitemata DHB Boardroom, Level 1, 15 Shea Terrace, Takapuna, commencing at 2.02p.m.

PART I - Items considered in Public Meeting

COMMITTEE MEMBERS PRESENT:

Gwen Tepania-Palmer (Committee Chair) (ADHB and WDHB Board member)
Max Abbott (WDHB Deputy Chair) (present from 2.30p.m.)
Jo Agnew (ADHB Board member)
Peter Aitken (ADHB Board member)
Judith Bassett (ADHB Board member)
Chris Chambers (ADHB Board member)
Lee Mathias (ADHB Deputy Chair)
Robyn Northey (ADHB Board member) (present from 2.05p.m.)
Allison Roe (WDHB Board member)
Rev Featunai Liuaana (Co-opted member)

ALSO PRESENT: Ailsa Claire (ADHB, Chief Executive)
Debbie Holdsworth (ADHB and WDHB, Director Funding)
Simon Bowen (ADHB and WDHB, Director Health Outcomes)
Tim Wood (ADHB and WDHB, Deputy Director Funding)
Ruth Bijl (ADHB and WDHB, Funding and Development Manager, Child, Youth and Women's Health)
Karen Bartholomew (ADHB and WDHB, Public Health Physician)
Craig Heta (ADHB and WDHB, Portfolio Manager, Maori Health)
Paul Garbett (WDHB, Board Secretary)
(Staff members who attended for a particular item are named at the start of the minute for that item)

PUBLIC AND MEDIA REPRESENTATIVES:

Lynda Williams, Auckland Womens Health Council
Tracy McIntyre, Waitakere Health Link
Brian O'Shea, ProCare
Lorelle George, Comprehensive Care/Waitemata PHO
Rowan Quinn, Radio New Zealand

APOLOGIES: Apologies were received and accepted from Lester Levy, Sandra Coney, Warren Flaunty, Christine Rankin, Elsie Ho, Tim Jelleyman and Dale Bramley.

WELCOME: The Committee Chair gave a warm welcome to all those present.

KARAKIA: The Committee Chair led the meeting in the Karakia.

DISCLOSURE OF INTERESTS

There were no additions or amendments to the Interests Register.

There were no declarations of interests relating to the agenda.

1. AGENDA ORDER AND TIMING

Items were taken in the same order as listed on the agenda.

2. COMMITTEE MINUTES

2.1 Confirmation of the Minutes of the Auckland and Waitemata District Health Boards' Community and Public Health Advisory Committees Meeting held on 02nd September 2015 (agenda pages 7-17)

Resolution (Moved Judith Bassett/Seconded Jo Agnew)

That the Minutes of the Auckland and Waitemata District Health Boards' Community and Public Health Advisory Committees Meeting held on 02nd September 2015 be approved.

Carried

Matters Arising (agenda page 18-19)

No issues were raised.

2.05p.m – Robyn Northey present.

3 DECISION ITEMS

There were no decision items.

4. INFORMATION ITEMS

4.1 Auckland DHB Integrated Child and Youth Mental Health and Addiction Direction 2013-2023 Update (agenda pages 20-41)

Hilary Carlile (Project Manager), Tim Wood (Chair of Child and Youth Mental Health and Addictions Direction Implementation Governance Group, Acting Funding and Development Manager, Mental Health and Addictions), Sarah Gray (Public Health Physician, Auckland DHB) and Shreya Rao (youth representative) were present for this item.

Shreya Rao spoke of her role representing young people who use these services across Auckland DHB, assisting the Steering Group in developing the scorecard and in considering issues affecting the wellbeing of young people.

Hilary Carlile provided context for the report. Matters that she covered included:

- The vision is to assist children, young people and their families to experience and enjoy good mental health and wellbeing.
- From the young people involved in this work it is clear that enjoying wellbeing is important, as well as getting help when difficulties are being experienced.
- The principles being followed in this project included meaningful co-design with young people; responsiveness; recognising diversity; importance of community; and intervening earlier.
- When they had presented to CPHAC in October 2014, the Committee had requested them to develop a scorecard to measure the impact of implementing the Direction. The team involved had been working hard on this and had produced the draft scorecard shown in the agenda report; however this is an ongoing work in progress. As with any scorecard the key issue is what the right data to measure is. They had tried to develop measures for each of the areas of the Direction. The status bar in the scorecard shows for each measure whether it is a hard measure (green), still being worked on (amber) or requiring a lot of work (red). They are still working on the reliability of data and considering what new data they want to include.
- 'Look Up', the Youth Innovation Forum occurring on 16 October (described on page 22 of the agenda) provides an opportunity to learn and experience. It will explore a range of technology options including wellbeing applications as well as clinically based applications like SPARX. There is a wide range of other aspects including a chill out zone with four psychiatrists available and an area for service innovation, to encourage people to express their ideas of what makes them feel great.

Shreya Rao advised that the Forum will also be promoting the approach of the Mental Health Foundation to addressing social stigma when people become unwell and discussing interventions by which young people can help support their peers.

Hillary Carlile advised that Michelle Atkinson (who had presented to CPHAC in October 2014 on the Direction) was currently returning from the Youth Mental Health Conference in Montreal, where she had won the prize for the best youth focused poster. She had played a key role in developing the 'Look Up' Forum.

Matters covered in discussion and response to questions included:

- 'Look Up' on 16 October will be the first such event. One of the aims is to find out what young people and those working with them want next. If there is support for another Forum, that would happen.
- Questions were raised as to whether youth suicide is a useful measure and whether it should be so prominent in the scorecard. In response, Tim Wood commented that youth suicide is a key issue and to monitor it is critically important. A key consideration in placing it first in the score card is keeping it at the front of their minds; they needed to keep challenging themselves on

the issue and keep discussing it. Even if they could not change the trend, that did not negate the need to have it at the forefront.

- In response to a question on utilising other game type applications (in addition to SPARX), Hillary Carlile advised that there are many such products on the market and they need to be focused in what they provided at 'Look Up'. Overseas, many products had been found to be useful.
- Ailsa Claire acknowledged the work of all those involved and noted how this work reflected key values of Auckland DHB including the wish to co-design and also understand the needs of the people using its services. She asked if it would be feasible to have more user surveys, to get more quantitative information. In response Shreya Rao advised that Auckland DHB is starting to track real time feedback.
- With regard to addressing the issue of workforce diversity, Tim Wood noted that this issue still had to be worked through by the group. It would be brought back subsequently. Ailsa Claire commented that this was part of the wider organisational issue of how to develop the ethnic mix of the workforce generally. Work done in this youth mental health area would help contribute to that. Hilary Carlile noted the importance of actively starting in schools to get young people thinking about careers in health. A project focused on Pacific young people had illustrated the benefits of this.
- Rev. Liuaana suggested that perhaps the approach taken focused too much on the end results in mental health. In response, Hilary Carlile said that the challenge is to collect that earlier data and to make sure it is good data; there is not currently good data on what is happening from a wellbeing perspective in schools. Shreya Rao suggested that the issue is about going out and talking to young people, who don't necessarily want to discuss mental health issues. The 'Look Up' Forum provided an informal way to start those conversations.
- In response to a question as to whether the timing of the 'Look Up' Forum in October was good in view of the pressure of upcoming examinations, Tim Wood suggested that it may be useful for young people to have these discussions at a time when they are under extra stress. It is hoped that the Forum will help in coping with such stress.

The Committee Chair thanked the presenters for the work done to date and encouraged them in the direction being taken. Challenges will remain, but, as Ailsa Claire had pointed out, it is very important to get the values of youth included in shaping co-design and development of support for young people.

2.30p.m – Max Abbott present.

Resolution (Moved Lee Mathias/Seconded Peter Aitken)

That the Community and Public Health Advisory Committee:

a) Receives the report.
b) Notes the approach taken to develop the Auckland DHB outcomes framework and scorecard and the progress made.

Carried

4.2 Mental Health and Addictions Update – 2014/15 Actions (agenda pages 42-63)

Jean-Marie Bush (Portfolio Manager, Mental Health and Addictions), Tim Wood (Acting Funding and Development Manager, Mental Health and Addictions) and Ruth Williams (Chair of the Waitemata Stakeholder Network) were present for this item.

Tim Wood introduced the report. Matters that he covered included:

- The report focuses on the work of the Funder with the Mental Health NGO sector and the Provider Arm. The two DHBs are at different stages of developing collaborative arrangements with the NGO sector. The Waitemata Stakeholder Network has been very well embedded over a long period, develops a plan every five years, and works through that. At Auckland DHB the corresponding process is at a much earlier stage of development and Innovate has had only a few meetings to date and is very much in a formative stage, however there is a very high level of enthusiasm from everyone involved to progress this approach.
- The work done with the Waitemata Stakeholder Network tends to "sit under the radar" in that they look at the issues coming up and how they can be resolved collectively.
- The report includes an update on the work being done to develop an employment strategy for people with mental health conditions, to improve employment opportunities. The document shown in the report, developed as a collaborative project, is still very much a draft and is going through a consultation and approval process with stakeholders.
- With regard to Support Hours, the report notes that discussions are continuing with NGOs on how this approach might be refined going forward.

Ruth Williams commented that one of the most important roles of the Stakeholder Network is consulting with the community.

Matters covered in discussion and response to questions included:

- It was suggested that as the DHBs are amongst the biggest employers in the region, it would be worthwhile for them to look at how they approached employment of people with mental health conditions. Tim Wood advised that the discussion had not occurred, but it would be good to have it.
- With regard to the Mental Health and Employment Strategy, it was suggested that the list of proposed "Everyone's Business Champions" (page 59 of the agenda) might be strengthened by the inclusion of some business people and potential employers, useful also in showing the perspective of employers.
- Jean-Marie Bush advised that Auckland DHB has a contract to help people with mental health conditions find jobs; Waitemata DHB does not have a specific contract for that. Ruth Williams confirmed that the NGOs are involved in links to business and looking for job connections.
- Questions were asked about at what point does an employee have a responsibility to advise his or her employer about mental health issues and at what point does the employer need to know? In response Jean-Marie Bush advised that these questions are often asked and support workers are quite skilled at working on these matters. There is a lot of support given to people on that.

The Committee Chair acknowledged the authors of the report and expressed appreciation of the vignettes that had been included; it was very useful to see matters through the eyes of those people that use the service. She thanked those involved for the work they had done and the partnering approach, which helped to strengthen the service itself. She thanked Ruth Williams for attending the meeting; the stakeholder groups are very important.

Resolution (Moved Judith Bassett/Seconded Lee Mathias)

That the report be received.

Carried

4.3 Child, Youth and Women's Health (agenda pages 64-72)

Ruth Bijl (Funding and Development Manager - Child, Youth and Women's Health), Natalie Desmond (Senior Programme Manager - Child Health), Pam Hewlett (Programme Manager - Women's Health) and Dr Karen Bartholomew (Public Health Physician) were present for this item. Apologies were conveyed from Dr Tim Jelleyman (WDHB Community Paediatrician) and Dr Alison Leversha (ADHB Community Paediatrician).

Ruth Bijl introduced the report, highlighting some key points. This included advising that results for the immunisation health targets for the first quarter had been received since the report was written and these confirmed that Auckland DHB had reached the 95% target for immunisation at eight months, a major achievement. She also noted that Auckland Girls Grammar School is delighted to have a new school based service established there. She had visited the school to look at possible locations and the school is extremely supportive.

Natalie Desmond commented on the immunisation results. The results for Auckland DHB are very pleasing, with the only area behind target being Maori at 90%. They are working on early engagement with Maori babies through primary care. For Waitemata DHB there are longstanding issues of a high decline rate as well as delays in immunising. The figure was 93% for the previous quarter, however there had been a very good start to the current quarter with 95% already achieved, a very positive sign.

The meeting was advised that whooping cough remains an issue, with new cases each month. Work continues with ARPHS on this issue. This illness is always around and protection from it is important.

Dr Karen Bartholomew commented on the improvement in the cervical screening rate for both DHBs (pages 71-72 of the agenda). While this was a small percentage increase, it represented a great deal of work by the PHOs and a large number of additional women screened.

Brian O'Shea (Procare) endorsed comments by Natalie Desmond and Karen Bartholomew on how well the PHOs and DHBs are working together to achieve targets.

Matters covered in discussion and response to questions included:

- With regard to oral health enrolments at one year, results are poor. It is acknowledged that there is a great deal of work to be done on this. As shown by the graphs on page 70 of the agenda, oral health for Pacific children is particularly poor. A strategy is being worked on to change hearts, minds and behaviour on this. Rev. Liuaana also noted that at a recent symposium on the effects of sugar, advice had been given that if oral decay is not dealt with from ages 0-6, then there is a much bigger chance of developing diabetes. He commented that it is positive to see that a strategy is being developed for Pacific children.
- The issue of health literacy was raised and whether the various programmes are tied up together. Ruth Bijl advised that it is understood how important it is that different providers give consistent messages to young people and their parents.
- The previous suggestion that the public health nurse role needs review was re-iterated.
- With regard to breastfeeding, Pam Hewlett advised that at both DHBs the joint midwifery well child group is supporting training on this issue and improving the consistency of information provided to women.
- Lee Mathias raised the need to persuade the Ministry of Health to strengthen the breastfeeding target in view of evidence supporting exclusive breastfeeding and therefore put forward the following motion.

Resolution (Moved Lee Mathias/Seconded Allison Roe)

That it be recommended to the Auckland and Waitemata District Health Boards:

That the Board lobby the Ministry of Health for it to change the six month breast feeding target to read: "exclusive breast feeding" and set the target at 75%; and for the target to be included for well child providers.

Carried

Cervical Screening – Consultation by the Ministry of Health on HPV Screening as part of the screening pathway (page 72 of the agenda)

Karen Bartholomew advised that the DHBs will put in a submission on this. As the closing date for feedback to the Ministry is 23 October it was agreed that the draft submission be circulated by e-mail to Board members for comment before being submitted.

The Committee Chair acknowledged the work of the team and thanked the presenters.

Resolution (Moved Lee Mathias/Seconded Jo Agnew)

That the Community and Public Health Advisory Committee note results against key child, youth and women's health indicators, with accompanying commentary.

Carried

4.4 Proposed Building (Pools) Amendment Bill 2015 (agenda pages 73-76)

Dr David Sinclair (Senior Medical Officer, Auckland Regional Public Health Service Medical Team) was present for this item.

Simon Bowen introduced David Sinclair to the Committee and noted that it was intended to have a more detailed paper go to the two Boards.

David Sinclair summarised the paper, including the main proposals in the Bill, concerns with them and the process being followed.

David Sinclair confirmed that ARPHS will be preparing a submission on the Bill and will be looking for the DHBs' support. As this is a Government Bill there will need to be consultation with the Ministry of Health. The closing date for submissions is 6 November and the proposed submission will be circulated to Board members prior to being submitted.

Resolution (Moved Robyn Northey/Seconded Max Abbott)

That the Community and Public Health Advisory Committee:

a) **Receive this report.**

b) **Note ARPHS is continuing to liaise with other agencies about the draft Bill.**

Carried

5. STANDARD REPORTS

5.1 Planning, Funding and Outcomes Update (agenda pages 77-87)

Debbie Holdsworth (Director Funding) and Simon Bowen (Director Health Outcomes) presented this item.

Matters that were highlighted or updated included:

- Final approvals of the Annual Plans for both DHBs.
- Annual Reports for both DHBs are nearing completion.
- Waitemata DHB's Health Services Plan will be coming to its next Board meeting.
- The responses to the various questions raised at the previous CPHAC meeting provided in the ARPHS section of the report.

Matters covered in discussion and response to questions included:

- With regard to the Asian International Benchmarking Report (referred to on page 80 of the agenda), Wendy Bennett (Manager-Planning and Health Intelligence) advised that this looked at a range of other countries where data is available on health outcomes. Some of these are Asian countries; some are non-Asian countries with Asian populations. Simon Bowen noted that this data needs to be looked at to see what it tells us and how it should be interpreted; internationally what does best experience look like? Lee

Mathias advised that Counties Manukau DHB has useful information on Asian populations' health broken down by ethnicity and country of origin. Simon Bowen said that he will contact Counties Manukau DHB on this.

- The Committee Chair suggested that it would be useful to receive an update on the work being done with Community Nurses in Pacific Health; it is important to make sure that there are the necessary resources to meet the high needs there. She also suggested that it would be useful to see a table of work aligned to the Pacific Health Action Plan. Jo Agnew suggested that it would also be useful to have an analysis of whether some of the things being done in Pacific Health should be replicated for other ethnicities. Rev. Liuaana commented that it will be important to see data from Enua Ola, HVAC etc. A paper on Pacific Health was requested for the early part of 2016. Debbie Holdsworth noted that Lita Foliaki had reported to CPHAC at its July meeting and had been asked to develop a Pacific scorecard; they hoped to have that soon.
- The Committee Chair suggested developing a road map to inform the scorecard, just to understand the interlocking arrangements between the various groups reaching out into the community, for example Pacific Health and Oral Health – covering how these work together and where there may be gaps.
- For Maori Health, the Committee Chair noted that it was good to see the programme to support pregnant mother s become and stay smokefree; also the framework being developed for phase two cardiac rehabilitation in the community.

Resolution (Moved Robyn Northey/Seconded Lee Mathias)

That the report be received.

Carried

6 General Business

There was no general business.

The Committee Chair thanked those present for their participation in the meeting.

The meeting concluded at 3.28p.m.

SIGNED AS A CORRECT RECORD OF A MEETING OF THE AUCKLAND AND WAITEMATA DISTRICT HEALTH BOARDS' COMMUNITY AND PUBLIC HEALTH ADVISORY COMMITTEES HELD ON 14 OCTOBER 2015

_____CHAIR

8.1 Capital Investment Committee Update – Mason Clinic 15 Bed Unit Proposal

Recommendation:

That the Board receive the Capital Investment Committee Update for the Mason Clinic, 15 bed unit proposal.

Prepared by: Ian McKenzie (General Manager, Mental Health Services) and Dr Jeremy Skipworth (Clinical Director, Mental Health Services)

Executive Summary

The Business case "Mason Clinic Increasing Forensic Psychiatric Capacity" was provided to the Capital Investment Committee for consideration in August this year following the endorsement of the Waitemata Board at the August meeting. As a result of that meeting the Capital Investment Committee requested further information from Waitemata DHB and this information was provided. The Committee met again on 22 October 2015 at the Mason Clinic to enable further discussion around the questions raised and to see the damage caused by water ingress first hand.

At that meeting the Capital Investment Committee indicated that they will be recommending that the business case for a new unit on the Mason Clinic site is endorsed. They also indicated that before they would consider future business cases in relation to Mason Clinic they would need to see a clear picture of regional mental health service planning, particularly involving the provision of secure care. This will be required as part of the case for the Mason Clinic remediation works programme, when it is submitted to the Capital Investment Committee later this year.

9 Resolution to Exclude the Public

Resolution:

That, in accordance with the provisions of Schedule 3, Sections 32 and 33, of the NZ Public Health and Disability Act 2000:

The public now be excluded from the meeting for consideration of the following items, for the reasons and grounds set out below:

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
1. Minutes of the Meeting of the Board with Public Excluded 23/09/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Confirmation of Minutes** As per the resolution(s) from the open section of the minutes of the above meeting, in terms of the NZPH&D Act.
2. Minutes of the Hospital Advisory Committee with Public Excluded 23/09/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Confirmation of Minutes** As per the resolution(s) from the open section of the minutes of the above meeting, in terms of the NZPH&D Act.
3. Minutes of the Audit and Finance Committee with Public Excluded 02/09/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
4. Minutes of the Audit and Finance Committee with Public Excluded 14/10/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)] **Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]
5. Minutes of the Wilson Home Trust with Public Excluded 17/07/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Obligation of Confidence** The disclosure of information would not be in the public interest because of the greater need to protect information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment where the making available of the information would be likely to; (i) prejudice the supply of similar information, or information from the same source, and where it is in the public interest that such information should continue to be supplied; or (ii) otherwise damage the public interest. [Official Information Act 1982 S.9 (2) (ba)]
6. Minutes of the Three Harbours Health Foundation with Public Excluded 20/05/15	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)]

General subject of items to be considered	Reason for passing this resolution in relation to each item	Ground(s) under Clause 32 for passing this resolution
7. Clinician Appointments to the Hospital Advisory Committee	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Privacy** The disclosure of information would not be in the public interest because of the greater need to protect the privacy of natural persons, including that of deceased natural persons. [Official Information Act 1982 S.9 (2) (a)]
8. Health and Safety Incidents	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Privacy** The disclosure of information would not be in the public interest because of the greater need to protect the privacy of natural persons, including that of deceased natural persons. [Official Information Act 1982 S.9 (2) (a)]
9. Northern Electronic Health Records Update	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Commercial Activities** The disclosure of information would not be in the public interest because of the greater need to enable the Board to carry out, without prejudice or disadvantage, commercial activities. [Official Information Act 1982 S.9 (2) (i)]
10. Security Review	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Safety** The disclosure of information would not be in the public interest because of the greater need to protect the health or safety of the public. [Official Information Act 1982 S.9 (2) (c)]
11. Collaboration	That the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, under section 6, 7 or 9 (except section 9 (2) (g) (i)) of the Official Information Act 1982. [NZPH&D Act 2000 Schedule 3, S.32 (a)]	**Negotiations** The disclosure of information would not be in the public interest because of the greater need to enable the board to carry on, without prejudice or disadvantage, negotiations. [Official Information Act 1982 S.9 (2) (j)]