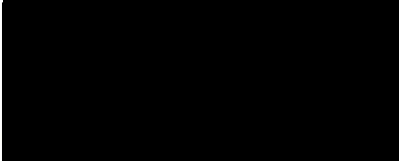




Waitemata
District Health Board
Best Care for Everyone

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22 January 2019



Dear [REDACTED]

Re: OIA request – pager systems

Thank you for your Official Information Act request received 10 December 2018 seeking details of pager systems used by Waitemata District Health Board (DHB).

Waitemata DHB has the largest resident population of any DHB in New Zealand, currently standing at more than 630,000 people. We have a workforce of more than 7,500 staff working from more than 80 sites across the Waitemata district and beyond.

Responses to your questions are provided below.

- *The number of pagers used and owned by the DHB and what these are used for (including how regularly they are used).*

Waitemata DHB currently has 623 paging devices in use. Twenty-four of these are emergency pagers that are used and tested every day. Another 40 are on-call pharmacy pagers used daily.

The remainder are used by on-call registrars, allied health, mental health, ward co-ordinators, security and management. Most are used daily.

- *Any advice, analysis or planning documents in the last 12 months about phasing out pagers by upgrading to more modern communications systems.*

A copy of a Senior Management Team (SMT) paper dated 12 April 2018 is enclosed for your information (**see appendix one**). Please note that information regarding staff contact details have been redacted due to privacy reasons. Information that is commercially sensitive has also been redacted and is withheld under section 9(2)(b) of the Official Information Act 1982.

If you are dissatisfied with this decision, you have the right to make a complaint to the Ombudsman, which can be contacted via www.ombudsman.parliament.nz.

- *Any advice, or analysis in the last 12 months about the reliability of the DHB's paging systems.*

There have been no major reliability issues with the pager system but the DHB continues to transition to more modern technology to support the best care for our patients.

For example, over the last 12 months 130 pagers previously used by House Surgeons have been phased out. This group now uses the modern SmartPage SaaS communications system.

SmartPage is planned to be extended to our registrars, emergency teams, pharmacy and mental health staff over the next 12-18 months and Waitemata DHB expects to phase-out all pager use within 24 months.

I trust that this information meets your requirements. Waitemata DHB, like other agencies across the state sector, supports the open disclosure of information to assist the public's understanding of how we are delivering publicly-funded healthcare.

This includes the proactive publication of anonymised Official Information Act responses on our website from 10 working days after they have been released.

If you feel that there are good reasons why your response should not be made publicly available, we will be happy to consider this.

Yours sincerely



Stuart Bloomfield
Chief Information Officer
Waitemata District Health Board

Title : Smartpage for RMOs 24/7

Date: 12 April 2018

Recommendations:

The recommendations are that you:

a) Approve the rollout of Smartpage for RMOs 24/7

Yes/No

Key Issues

- Currently, Smartpage clinical is available to clinical staff after-hours (4pm-8am)
- Recent quality improvement programmes, in particular TransforMed and the Deteriorating Patient Programme, have highlighted the need for better communication between clinical staff and better RMO task management, across all shifts. Smartpage will significantly advance both of these requirements
- RMOs and other Smartpage users are unanimous in supporting this proposal to extend the availability of Smartpage to current users across all three shifts (24/7)
- To minimise administration, the proposal is to provide RMOs with a Smartpage enabled DHB device (android phone) which they will hold for the duration of their RMO employment at Waitemata DHB
- Approximately 170 devices will be required to provide current RMOs with a device. [REDACTED]
- [REDACTED]
- [REDACTED]

Contact for telephone discussion (if required)

| Name | Position | Telephone | Suggested first contact |
|-------------------|-------------|------------|-------------------------|
| Penny Andrew | I3 Director | [REDACTED] | |
| Stuart Bloomfield | CIO | [REDACTED] | |

Executive Summary

Smartpage is a smart mobile and web based clinical messaging and mobile task management system with three modules, Smartpage: Clinical; Orderly; and Emergency Messaging. Smartpage Clinical has been used at Waitemata DHB after hours (4pm-8am) by ward nurses, Duty nurse managers, Smartpage Coordinators, and house surgeons (RMOs) since 2013. The system is overwhelmingly endorsed by the RMOs and other users, and the RMOs and other users have consistently requested Smartpage be made available to them over all shifts (24/7). An extended trial in 2013-14 reported significant time savings and improved communication, with up to 15-20 minutes of time saved every hour. Recent quality improvement programmes, in particular TransforMed and the Deteriorating Patient Programme, have

highlighted the need for better communication and RMO task management across all shifts, both of which can be improved significantly by the use of Smartpage.

There is a regional Clinical Communication Tool (pager replacement) project that is currently running. The project team and sponsors are aware of Waitemata DHB's proposal to roll-out Smartpage to RMOs 24/7 and have approved this happening.

The proposal involves providing RMOs (currently there are 165 RMOs) with a DHB android phone that is enrolled in the DHB's mobile device management platform (MDM). [REDACTED]

[REDACTED] A process to manage assignment and return of devices and RMO training is being developed by a IS Information Analyst and i3 project manager, with the support of the METU i3 fellow. On-going support will be coordinated by the IS Information Analyst reporting to the CIO.

Background information

The Smartpage system consists of a ward web-interface accessed through the internet, a user smartphone application for android (and IOS application in testing), and a back-end infrastructure service delivered via the Cloud. It is a fully hosted service so the DHB did not need to install, maintain or support any internal server systems or applications and is secure (data is not stored on the user's smartphone). Smartpage has three software modules for clinical, orderly and emergency messaging.

Smartpage Clinical has been used at Waitemata DHB after hours (4pm-8am) by ward nurses, Duty nurse managers, Smartpage Coordinators, and house surgeons (RMOs) since 2013. The system involves providing a RMO with a device (currently an android phone). RMOs collect and return a device (android phone) to telephony at the beginning of each shift. The device is specific to the on-call role. They can rearrange messages by ward or by urgency on the phone to assist in organising and prioritising their work. The phones allow paged messages (pages) to be quickly acknowledged and can be used to communicate back either by text message or telephonically. ICU outreach nurses, duty nurse managers, Smartpage Coordinators, and others can access a hospital view of the paging activity. Clinicians, usually nurses, use a Smartpage web interface on ward computers to send tasks/information to Smartpage software enabled smart mobiles carried by on-call RMOs. The RMOs acknowledge these "pages" and communicate back either using the same software or by phoning back on the smart mobile instead. The mobile phones were role specific – they are not held by an individual but rather by any RMO covering a particular service who, at the end of the shift, passes the smart mobile onto the next on-call RMO covering the service.

An extended trial of Smartpage use over 2013-14 reported significant time savings and improved communication, with up to 15-20 minutes of time saved every hour. The system is overwhelmingly endorsed by the RMOs and other users and the RMOs and other users have consistently requested Smartpage be made available to them over all shifts (24/7).

Smartpage has increased visibility of the function of the hospital after-hours, including the status of patients and the roles of the nurses and house surgeons, through the provision of data previously not available. Coordinator functionality allows coordinator users to see all pages in the hospital, monitor the response to urgent tasks, and the work-load of doctors, and to take back and re-allocate tasks between doctors. Coordinator accounts also allow Duty Managers and ICU outreach nurses to have full oversight on a real-time basis as to hospital operations on a clinical level and to provide clinical support.

Smartpage provides a handover system which allows unfinished tasks and information on patients with ongoing problems to be transmitted accurately to the night or oncoming doctors.

More recent quality improvement programmes, in particular TransforMed and the Deteriorating Patient Programme, have highlighted the need for better communication and RMO task management. Smartpage will significantly advance both of these requirements. The Deteriorating Patient Programme requires the implementation of a new early warning scoring and escalation system. Making Smartpage available 24/7 via devices for RMOs will help ensure rapid communication of the EWS and critical patient information and, therefore, a faster response by appropriate staff. There is a Smartpage emergency messaging module currently in test phase that potentially could be used in the future as part of the deteriorating patient escalation system. In the TransforMed Programme, RMOs need a tool to support task management and enable earlier discharge, and a tool track and sort patients. Smartpage is the preferred tool that can perform all these functions and the tool that RMOs are already trained to use.

There is a regional Clinical Communication Tool (pager replacement) project that is currently running. The project team and sponsors are aware of Waitemata DHB's proposal to roll-out Smartpage to RMOs 24/7 and have approved this happening as essentially this proposal is an extended use of an existing technology.

Currently, RMOs collect and return a Smartpage enabled device (android phone) to telephony at the beginning of each shift. This has been problematic requiring administration of signing in and signing out and someone available to ensure a sufficient number of devices are charged for each shift. Charging cables frequently go missing and have had to be replaced regularly. There is no dedicated administrative resource, with the process dependent on the goodwill of telephony and an IS analyst from the Health Information Group to support this process. The process is not sustainable for Smartpage to be provided to RMOs 24/7 (there are currently ~165 RMOs; this will increase with introduction of the new RMO schedule later this year).

The proposal is to provide RMOs with a DHB device (android phone) with the Smartpage app uploaded on the phone, which the RMO keeps and is responsible for charging, for the term of their RMO employment at Waitemata DHB. The Health Information Group Information Analyst, an i3 project manager and the RMO METU fellow are working together to develop and formalise a process for providing RMOs with a phone at orientation with training, and a process for return of the phone at the end of their employment.

A BOYD option for RMOs is not recommended at this stage for several reasons: full functionality cannot be guaranteed; an IOS application is still being tested; 777 calls cannot be received with BOYD models,

which poses a clinical risk; DHB policy requires BYOD devices and BOYD apps to be enrolled in the DHB MDM (currently Secure HUB) and staff up take has been low; and BOYD devices are out of scope of technical support from the DHB and healthAlliance.

Costs/Financials Implication including source of funding

[REDACTED]

Next Steps

If the SMT approves this proposal, the plan is to roll-out the devices in May 2018.