



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

DIARRHOEA +/- VOMITING ADULTS

Date: _____ Time: _____ Assessment nurse: _____ Sign: _____

INCLUSION CRITERIA

- Diarrhoea +/- vomiting suggestive of Gastroenteritis
e.g. profuse watery diarrhoea, associated with nausea and / or vomiting.

EXCLUSION CRITERIA

- Vomiting only Coffee ground vomitus
 Severe pain / guarding Melaena
 Minimal diarrhoea (1-2 episodes only)
Consider Sepsis Pathway for febrile, unwell patients

- Select Treatment Pathway on Whiteboard**
Enter actual time started
Data collected for Ministry of Health

STOP!

Not suitable for this Best Care Bundle
Select 'BCB removed' Treatment Pathway
Continue usual nursing cares

NURSING ASSESSMENT *Aim < 30 minutes*

- History, examination & vital signs *Document on Nursing Assessment Record*
 IV line and bloods for **all patients in Acutes** *In Waiting room use clinical judgement*
- General profile, LFT's, Lipase, Lactate (VBG)
 Blood cultures *only if temp > 38 °C or pregnant ♀ (? Listeria)*
 Stool culture → Do NOT send routinely. *Indications page 4*
- Provide patient information sheet

RED FLAGS *All red flag boxes must be populated* = YES = NO

- Age ≥ 65 Abnormal Vitals / NEWS ≥ 3 Signs of shock or severe illness
 ESRF Known Ulcerative Colitis Pregnancy ? *Listeria*
 Blood in the stool Known Crohn's Dx Nursing concern Known cardiac failure

NO RED FLAGS

Continue Best Care Bundle

RED FLAGS PRESENT (ANY) → Senior Dr review ASAP (*SMO / Senior Registrar*)

Continue Best Care Bundle. Intervention if any: _____

Exit Care Bundle: Reason: _____

↳ Select 'BCB removed' in TP column, Electronic Whiteboard. *This signals the medical staff*

Dr Name: _____ Sign: _____

SEVERITY ASSESSMENT TOOL *Choose more severe pathway if any doubt*

	<input type="checkbox"/> MILD	<input type="checkbox"/> MODERATE & SEVERE
General wellbeing	<input type="checkbox"/> Feels mildly unwell <i>Not distressed</i>	<input type="checkbox"/> Looks and feels unwell <i>e.g. lethargic, tired, light headed</i>
Pulse rate	<input type="checkbox"/> 50 - 99 bpm	<input type="checkbox"/> ≥ 100 bpm
Blood pressure	<input type="checkbox"/> Normal	<input type="checkbox"/> Orthostatic hypotension / hypotension
Perfusion	<input type="checkbox"/> Peripherally warm	<input type="checkbox"/> Peripherally cool / clammy
Hydration status	<input type="checkbox"/> Moist mucous membranes	<input type="checkbox"/> Dry mucous membranes, sunken eyes
Urine output	<input type="checkbox"/> Normal or dark urine	<input type="checkbox"/> Decreased urine output <i>Anuria >12 hrs: severe illness</i>
Fluid tolerance	<input type="checkbox"/> Tolerating fluids	<input type="checkbox"/> Tolerating no or minimal fluids
No. Diarrhoea episodes	<input type="checkbox"/> ≤ 5 / 24 hrs	<input type="checkbox"/> ≥ 6 / 24hrs



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MILD PATHWAY

- For most patients managed in the waiting room / cubicles area
- Assessment nurse review at each interval. Manage according to instructions
- Document all medications on Electronic Medication chart. Dr to prescribe unless standing order

START	Time:	<input type="checkbox"/> Encourage oral intake	<input type="checkbox"/> Small regular sips
	Sign:	Consider antiemetic: <input type="checkbox"/> Given: _____ <input type="checkbox"/> Not given	<i>Ondansetron is a standing order Formulary page 4</i>
1-hour after Rx started	Time:	<input type="checkbox"/> Improved <i>Tolerating oral fluids</i>	→ <input type="checkbox"/> Clinician consider discharge <i>Discharge criteria and check list below</i>
	Sign:	<input type="checkbox"/> Not improved <i>Inadequate fluid intake</i>	→ <input type="checkbox"/> Move to Moderate & Severe Pathway <i>Start at the first box</i> <input type="checkbox"/> Place IV line & start fluids
2-3 hours after Rx started	Time:	<input type="checkbox"/> Improved <i>Tolerating oral fluids</i>	→ <input type="checkbox"/> Clinician consider discharge <i>Discharge criteria and check list below</i> <i>Otherwise: move to Moderate & Severe Pathway</i>
	Sign:	<input type="checkbox"/> Not improved <i>Inadequate fluid intake</i>	→ <input type="checkbox"/> Move to Moderate & Severe pathway <i>Start at the first box</i> <input type="checkbox"/> Place IV line & start fluids

DISCHARGE CRITERIA <i>Must meet all</i>	ADMISSION CRITERIA
<input type="checkbox"/> Senior doctor agrees with discharge plan <input type="checkbox"/> Vital signs within normal limits <input type="checkbox"/> Significant clinical improvement <input type="checkbox"/> Patient feels better <input type="checkbox"/> Tolerating oral fluids	<input type="checkbox"/> Persistent abnormal vital signs <input type="checkbox"/> Severe dehydration or electrolyte abnormality <input type="checkbox"/> > 10% weight loss <input type="checkbox"/> Not able to tolerate oral fluids <input type="checkbox"/> Senior clinician discretion Dr: _____

DISCHARGE CHECKLIST	NOTE ON EDS <i>see BCB Proforma EDS</i>
<input type="checkbox"/> Meets all discharge criteria <input type="checkbox"/> Patient information sheet provided <i>Bundle pack or BCB page, EM CeDS</i> <input type="checkbox"/> Medical certificate provided <input type="checkbox"/> Script for antiemetics / antidiarrhoeals if indicated <input type="checkbox"/> Antibiotics only if indicated <i>see page 4 for indications</i>	<input type="checkbox"/> Antiemetics, antidiarrhoeals and fluids given in ED <input type="checkbox"/> Follow up with GP in a 2-5 days time. <i>See EDS proforma, link from the EDS. It is already pre-populated with patient information and advice that prevents duplication</i>



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MODERATE & SEVERE PATHWAY

- Assessment nurse review at each interval and manage according to instructions
- Document all medications on Electronic Medication chart. Dr to prescribe unless standing order
- Document all fluids on Fluid Balance chart. The first 1000 mL is a standing order

START	<p>Antiemetic: Given: _____</p>		<p><i>First 1000 mL is standing order May have blocks of ice / sips of water</i></p>	<p>Start here if moved from Mild Pathway</p>
	<p>IV fluids: <input type="checkbox"/> Start fluid balance chart <input type="checkbox"/> IV line and bloods (if not done already) <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride / 30-60 min</p>			
1-hour after Rx started	<p>Time: <input type="checkbox"/> Improved →</p>	<p>Oral fluids: As tolerated IV fluids: <input type="checkbox"/> Continued <input type="checkbox"/> Not continued <i>Clinician decision</i></p>		
	<p>Sign: <input type="checkbox"/> Not improved and / or inadequate fluid intake →</p>	<p>Antiemetic: Given: _____ <input type="checkbox"/> Not given <i>Formulary page 4</i> IV fluids: <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride or Plasmalyte / 1 hour <i>Dr to prescribe. Add K+ if hypokalaemic - see formulary</i></p>		
2-3 hours after Rx started	<p>Time: <input type="checkbox"/> Improved →</p>	<p>Oral fluids: As tolerated Clinician: Consider discharge <i>Discharge criteria and check list page 2</i></p>		
	<p>Sign: <input type="checkbox"/> Not improved and / or inadequate fluid intake →</p>	<p>2nd Antiemetic: Given: _____ <input type="checkbox"/> Not given <i>Formulary page 4</i> Loperamide: <input type="checkbox"/> Given <input type="checkbox"/> Not given <i>At Clinician discretion</i> IV fluids: <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride or Plasmalyte / 4 hours <i>Dr to prescribe. Add K+ if hypokalaemic</i> Clinician: Consider alternative etiologies. SMO review <input type="checkbox"/> Consider admission - refer early if probable <input type="checkbox"/> Consider need for antibiotics - <i>indications page 4</i> <input type="checkbox"/> Move to ED Observation (ISO OBS) if discharge likely</p>		
3-4 hours after Rx started	<p>Time: <input type="checkbox"/> Improved →</p>	<p>Oral fluids: As tolerated Clinician: Consider discharge. <i>Discharge criteria & checklist page 2</i> Location: Move to ISO Observation area if not already there</p>		
	<p>Sign: <input type="checkbox"/> Not improved and / or inadequate fluid intake →</p>	<p>3rd Antiemetic: Given: _____ <input type="checkbox"/> Not given <i>Formulary page 4</i> Loperamide: <input type="checkbox"/> Given <input type="checkbox"/> Not given <i>Clinician discretion</i> IV fluids: <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride or Plasmalyte / 4 hours <i>Add K+ if hypokalaemic - see formulary</i> Clinician: <input type="checkbox"/> Consider admission - document individualised care plan <input type="checkbox"/> Consider need for antibiotics - <i>indications page 4</i> <input type="checkbox"/> Consider alternative diagnosis if little improvement <input type="checkbox"/> Move to ED Observation (ISO OBS) if discharge likely</p>		

FORMULARY / MEDICATION OPTIONS

CHECK ALLERGY STATUS AND SEE MEDSAFE OR OTHER TEXT FOR FULL LIST OF CONTRAINDICATIONS**
ALL MEDICATIONS MUST BE CHARTED ON THE ELECTRONIC MEDICATION CHART

ANTI-EMETICS (in order of preference)

Medication	Dose	Route	Freq	Notes
Ondansetron	4 - 8 mg	IV / Oral	Q 6-8 hrs	First 4mg is a standing order. Max 24mg/24 hrs Further doses to be prescribed by a doctor
Metoclopramide	10 mg	IV / IM / Oral	Q 8 hrs	Slow IV. Not for < 20 y/o. Risk of dystonic reactions
Cyclizine	25 - 50	IV / IM / Oral	TDS	Slow IV

ANTISPASMODICS / ANTIDIARRHOEAL AGENTS

Hyoscine butylbromide	10-20 mg	IV / Oral	Q 8 hrs	Buscopan [®]
Loperamide	4 mg	Oral	Stat	Risk outweighs benefit with extended use. Risk of Haemolytic Uremic Syndrome with Shiga producing E.Coli. Contraindicated for hematochezia

FLUIDS

0.9% Sodium Chloride	1000 mL	IV	Over 30-60 min	First 1000 mL is a standing order
Plasmalyte or	1000 mL	IV	Over 1-4 hrs	Further fluid to be prescribed. Clinician choice
0.9% Sodium Chloride	1000 mL	IV		
Potassium Chloride	20-40 mmol	IV		Diluted in 0.9% Sodium Chloride. Administer no faster than 20 mmol / hr via infusion pump

ANTIBIOTIC RECOMMENDATIONS

Antimicrobial therapy does not dramatically alter the course of the illness
Presence of positive culture should not influence decision to treat with antibiotics if there is clinical improvement.
Antibiotic use is associated with risk of Haemolytic Uraemic Syndrome in patients with Shiga toxin producing E.Coli

High risk patients	<input type="checkbox"/> Immunocompromised <input type="checkbox"/> Blood or mucous in the stool <input type="checkbox"/> Illness lasting > 1/52 <input type="checkbox"/> Severe illness	Ciprofloxacin 500mg Oral BD 5-7 days Azithromycin 500mg Oral daily x 3 days can be considered if allergy/intolerance to quinolone or concern about resistance. ID consultant available via operator
Pregnancy	<input type="checkbox"/> ? Listeria (send blood culture)	Amoxicillin 500mg Oral TDS X 5-7 days Co-trimoxazole choice in penicillin allergy in second trimester. 5-7 days Otherwise DW ID, esp <12/40 or >28/40
Febrile traveller returning from endemic country	<input type="checkbox"/> ? Enteric fever Typhoid <input type="checkbox"/> Shigella	Ceftriaxone 2g IV daily
Water from a stream	<input type="checkbox"/> ? Giardia	Metronidazole 2g Oral OD for 3 days
Current / recent antibiotics	<input type="checkbox"/> ? Clostridium Difficile	Vancomycin 125mg QID Oral 10 days

STOOL CULTURE INDICATIONS: Should not be sent routinely

- Stool cultures are expensive and of limited utility (cost \$84.48 March 2018)
- Most cases of diarrhoea are of viral and bacterial aetiology, and are self-limiting

Any of:

<input type="checkbox"/> Immunosuppressed patient <input type="checkbox"/> Moderate or severe illness / admitted patients <input type="checkbox"/> Symptoms > 7 days <input type="checkbox"/> Bloody diarrhoea <input type="checkbox"/> Requested by Dr: _____	→
<input type="checkbox"/> Febrile traveller returning from endemic countries Consider enteric fever including Typhoid	→
<input type="checkbox"/> Current / recent antibiotics In the last 2 weeks <input type="checkbox"/> Other causes of diarrhoea ruled out	→
<input type="checkbox"/> Residential care <input type="checkbox"/> Recent hospitalisation / institution outbreak < 2 weeks	→

Send stool culture

Ask for:	Routine bacterial culture
Ask for:	Routine bacterial culture Parasites, ova or cysts
Ask for:	✓ C-Difficile testing
Ask for:	✓ C-Difficile testing ✓ Rotavirus / Norovirus