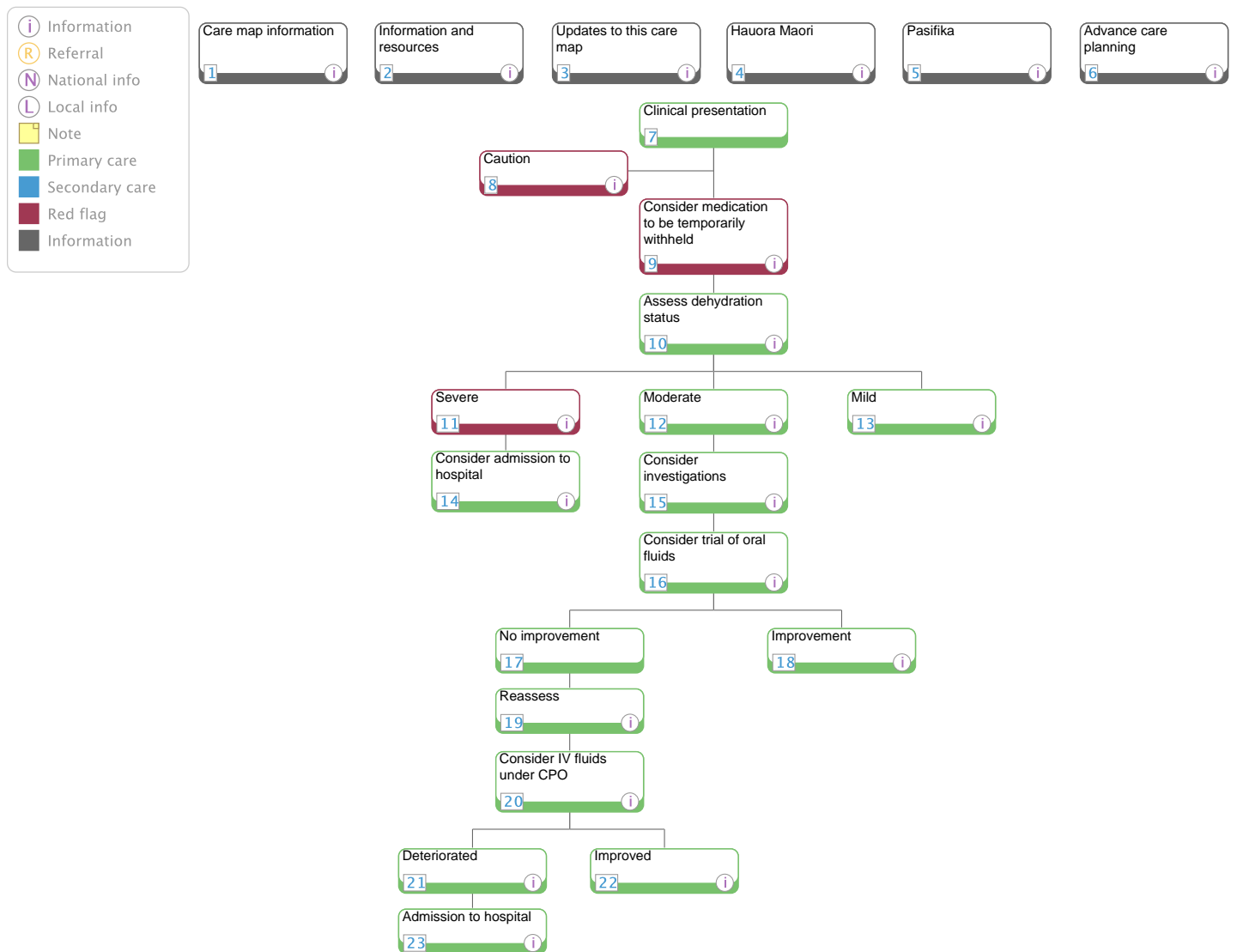


# Rehydration of Adults in Primary Care

Medicine > General medicine > Rehydration in Adults



# Rehydration of Adults in Primary Care

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## 1 Care map information

### Quick info:

This pathway aims to serve as a general guideline in the assessment and management of mild to moderate dehydration which is suitable for CPO management. This pathway is specific to body fluid losses from:

- vomiting
- diarrhoea
- hyperemesis
- other clinical need depending on clinical assessment and individual patient factors

### Out of scope:

- severe dehydration is not suitable for care under CPO and admission to hospital is recommended
- children <15 years
- DKA
- chronic kidney disease:
  - CKD 3 (gfr 30-59) - use pathway with caution
  - CKD 4 (grf 15-29 - avoid IV rehydration without consultation with on-call medical team
- septicaemia
- signs of shock
- heart failure
- undiagnosed abdominal pain
- intracranial causes

## 2 Information and resources

### Quick info:

#### Language translation assistance:

HBDHB Interpreting Service. To make an appointment (charges may apply):

- phone 06 878 8109 ext.. 5805 or
- email [interpreting@hawkesbaydhb.govt.nz](mailto:interpreting@hawkesbaydhb.govt.nz)

These websites may help with simple words and phrases:

- [Babelfish](#)
- [Google translate](#)

#### [Language Line:](#)

Professional interpreters are available, free of charge, for telephone-based sessions (44 languages are supported):

- Phone 0800 656 656
- Monday - Friday 9am - 6pm
- Saturday 9am - 2pm

Bookings are not usually necessary. For longer consultations (for example, a nurse consultation for a newly diagnosed person) it is best to make a booking at least 24 hours in advance by calling the above number or emailing [language.line@dia.govt.nz](mailto:language.line@dia.govt.nz) and providing your contact details and a summary of the service you require (time and date of the meeting, language, approximate length of the appointment, gender of interpreter (if relevant)).

## 3 Updates to this care map

### Quick info:

Date of publication: November 2016

Review date: November 2018

Published: 15-Nov-2016 Valid until: 30-Jun-2019 Printed on: 17-Sep-2018 © Map of Medicine Ltd

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This care map has been developed in line with consideration to evidenced based guidelines. For further information on contributors and references please see the Pathway's Provenance Certificate.

NB: This information appears on each page of this care map.

## 4 Hauora Maori

### Quick info:

Maori are a diverse people and whilst there is no single Maori identity, it is vital practitioners offer culturally appropriate care when working with Maori whanau. It is important for practitioners to have a baseline understanding of the issues surrounding Maori health. This knowledge can be actualised by (not in any order of priority):

- considering the importance of introductions ('whanungatanga') - a process that enables the exchange of information to support interaction and meaningful connections between individuals and groups. This means taking a little time to ask where this person is from or to where they have significant connections
- asking Maori people if they would like their whanau or significant others to be involved in assessment and treatment
- asking Maori people about any particular cultural beliefs they or their whanau have that might impact on assessment and treatment of the particular health issues

### Maori health services

HBDHB contracts Maori health providers to deliver community based nursing and social support services. A referral to one of these providers may assist Maori people to feel more comfortable about receiving these services.

#### **Central Hawke's Bay:**

##### [Central Health](#)

Cnr Herbert & Ruataniwha Streets, Waipukurau

Phone: 06 858 9559 Fax: 06 858 9229

Email: [reception@centralhealth.co.nz](mailto:reception@centralhealth.co.nz)

[Referral Form](#)

#### **Hastings:**

##### [Te Taiwhenua o Heretaunga](#)

821 Orchard Road, Hastings 4156

Phone: 06 871 5350 Fax: 06 871 535

Email: [taiwhenua.heretaunga@ttoh.iwi.nz](mailto:taiwhenua.heretaunga@ttoh.iwi.nz)

[Referral Form](#)

#### [Kahungunu Health Services](#) (Choices)

500 Maraekakaho Road, Hastings

Phone: 06 878 7616

Email: [kahungunu@paradise.net.nz](mailto:kahungunu@paradise.net.nz)

[Referral Form](#)

#### **Napier:**

##### [Te Kupenga Hauora](#)

5 Sale Street, Napier

Phone: 06 835 1840

Email: [info@tkh.org.nz](mailto:info@tkh.org.nz)

[Referral Form](#)

#### **Wairoa:**

Kahungunu Executive (no website)

65 Queen Street, Wairoa 4108

Phone: 06 838 6835 Fax: 06 838 7290

Email: [kahu-exec@xtra.co.nz](mailto:kahu-exec@xtra.co.nz)

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## **Secondary care Maori Health Services:**

Hawke's Bay DHB - Te Wahanga Hauora Maori Health Services

Phone: 06 878 8109 ext. 5779, 06 878 1654 or 0800 333 671 Email: admin.maorihealth@hawkesbaydhb.govt.nz

## **Further Information**

Practitioners should be versed in the knowledge of:

- historical overview of legislation that impacted on Maori well-being
- Maori models of health, such as [Te Whare Tapa Wha](#) and Te Wheke when working with Maori whanau
- national Maori Health Strategies:
  - **Mai Maori Health Strategy 2014-2019** - [Full file](#) or [Summary diagram](#)
  - **He Korowai Oranga:** Maori Health Strategy - sets the [Government's overarching framework](#) to achieving the best health outcomes for Maori
- local [Hawke's Bay health sector's strategies and initiatives](#) for improving Maori health and wellbeing

## **Cultural Competency Training**

Training is available through the Hawke's Bay DHB to assist you to better understand Maori culture and to better engage with Maori people. Contact the coordinator

Email: education@hbdhb.govt.nz to request details of the next courses.

## 5 Pasifika

Quick info:

Pacific people value their culture, language, families, education and their health and wellbeing. Many Pacific families have a religious affiliation to a local church group.

The Pacific people are a diverse and dynamic population:

- more than 22 nations represented in New Zealand
- each with their own unique culture, language, history, and health status
- share many similarities which we have shared with you in order to help you work with Pacific people more effectively
- for many families language, cost and access to care are barriers

Pacific ethnic groups in Hawke's Bay include Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau, Kiribati and Tuvalu. Samoan and Cook Island groups are the largest and make up two thirds of the total Pacific population. There is a growing trend of inter-ethnic relationships and New Zealand born Pacific populations.

Acknowledge [The FonaFale Model](#) (Pacific model of health) when working with Pacific people and families.

General guidelines when working with Pacific people and families (information developed by Central PHO, Manawatu):

- [Cultural protocols and greetings](#)
- [Building relationships](#) with your Pacific people
- [Involving family support and religion](#) during assessments and in the hospital
- [Home visits](#)

### **Hawke's Bay-based resources:**

- [HBDHB interpreting service website](#) or phone 06 8788 109 ext.. 5805 (no charge for the hospital; charges may apply for community-based translations) or contact coordinator at interpreting@hbdhb.govt.nz
- Pacific Navigation Services Ltd Phone: 027 971 9199
- services to assist Pacific people to access healthcare ([SIA](#))
- [Improving the Health of Pacific People in Hawke's Bay](#) - Pacific Health action Plan

### **Ministry of Health resources:**

- [Ala Mo'ui](#) Pathways to Pacific Health and wellbeing 2014-2018
- [Primary Care for Pacific people](#): a Pacific and health systems approach
- Health education resources in [Pacific languages](#) (links to a web page where you can download resources)

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## 6 Advance care planning

Quick info:

### **Advance Care Planning:**

Advance Care Planning is a voluntary process of discussion and shared planning for future health care. It involves the person who is preparing the plan, and usually involves family/whanau and health care professionals.

### **Advance Care Plan:**

An Advance Care Plan is the outcome of Advance Care Planning. It is formulated by the person and sets out their views about care towards the end of their life. It may also include views about medical care and a wide range of other matters. An Advance Care Plan may include an Advance Directive.

### **Advance Directive:**

An Advance Directive is a statement a person makes about their medical care in the future and becomes effective if a person ceases to be competent to make decisions for themselves. An Advance Directive is legally binding if made in appropriate circumstances.

### **Competency and Advance Care Planning:**

Competent people have the right to make autonomous decisions that as medical professionals we may regard as imprudent, and sometimes such decisions are a reflection of the person's longstanding personality, beliefs or lifestyle. This right is described in the Health and Disability Consumers Rights Acts.

According to ACP - A Guide for the NZ Health Care Workforce - "in the context of ACP, competency relates to an individual's ability to make a decision regarding their own health care (that is, competence at decision-making or decision-capacity). At a minimum, decision making capacity requires the ability to understand and communicate, to reason and deliberate, and the possession of a set of values".

Helpful websites:

- [The code of rights](#)
- [Advance care planning guide Ministry of Health](#)
- [Advance care planning resources](#)

## 8 Caution

Quick info:

Caution to be considered for:

- older adults
- pre-existing heart failure
- unable to manage at home
- prolonged duration of symptoms
- significant co-morbidities
- features of evolving illness
- recent overseas travel

## 9 Consider medication to be temporarily withheld

Quick info:

Some medications should be temporarily withheld during dehydration.

Consider temporarily discontinuing in at-risk patients:

- Sulfonylureas
- ACE inhibitors
- diuretics
- Metformin
- Angiotensin Receptors Blockers (ARBs)
- non-steroidal anti-inflammatory agents (NSAIDs)
- Dabigatran

To remember, the acronym is SADMAN + Dabigatran.

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## 10 Assess dehydration status

Quick info:

Assessment should include consideration of duration of symptoms combined with prospective total daily losses.

## 11 Severe

Quick info:

Severe dehydration is the result of large fluid losses and may be complicated by electrolyte and acid base disturbances which require immediate attention.

Symptoms include:

- significant thirst
- tachycardia
- low pulse volume
- cool extremities
- reduced skin turgor
- marked hypotension
- confusion

## 12 Moderate

Quick info:

Moderate dehydration:

- significant thirst
- oliguria
- sunken eyes
- dry mucous membranes
- weakness
- lightheaded

## 13 Mild

Quick info:

Mild dehydration:

- mild thirst
- concentrated urine

Trial oral fluids:

- 50-100ml/kg/24hours
- +/- antiemetic

This may include an electrolyte solution.

If no improvement in 24 hours, suggest review.

## 14 Consider admission to hospital

Quick info:

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Transfer to hospital and contact AAU on-call physician 06 8734812 or 027 7654459 (Mon-Fri 8am-5pm). Out of hours contact triage nurse via switchboard 06 8788109 extn 2623.

## 15 Consider investigations

Quick info:

**Investigations are not always necessary.**

Following the assessment of each case, clinical judgement is recommended to decide if further investigations are necessary. If necessary, these may include:

- creatinine and electrolytes - renal impairment may result from excessive fluid losses and may be especially important in older patients
- blood glucose
- MSU - infection/ketones
- faecal culture
- intractable vomiting may also be associated with multiple pregnancy
- weight

## 16 Consider trial of oral fluids

Quick info:

Trial oral fluids:

- 3-4 litres/24hours
- +/- antiemetic

This may include an electrolyte solution.

### Anti-emetics

Ondansetron:

- a single dose of 4-8mg Ondansetron is usually enough to allow oral rehydration therapy when given in mild to moderate dehydration. Prescribing additional doses is usually not recommended

Metoclopramide:

- should only be prescribed for short term use (up to five days)
- usual dose is 5-10mg repeated up to three times daily. Use lower dose in 16-20 year olds and those under 60kgs
- intravenous doses should be administered as a slow bolus over at least three minutes
- metoclopramide can rarely cause severe dystonias, e.g. oculogyric crisis. These can be treated with 1-2mg of IM or IV benztropine (bentropine)

Prochlorperazine (Stemetil, Antinaus, Buccastem):

- available in oral, buccal, and IM formulation. Adult dose for treatment of nausea/vomiting is:
  - oral tablet: adult acute attack 20mg initially then 10mg after two hours. Prevention 5-10mg 2-3 times daily
  - buccal tablet: adult 3-6mg twice daily. Tablets are placed high between upper lip and gum and left to dissolve
  - deep intramuscular injection: adult 12.5mg when required followed if necessary after six hours by an oral dose as above

An oral rehydration solution can be prescribed for dehydration. The currently funded oral rehydration solution is Enerlyte. The contents of each sachet of Enerlyte is dissolved in 200ml of water.

Antidiarrhoeals are generally not recommended unless exceptional circumstances.

## 18 Improvement

Quick info:

Consider review after 24 hours. Encourage oral fluids.

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## 19 Reassess

Quick info:

Reassess dehydration status. If considered severe, admit to hospital.  
Otherwise, consider IV fluids.

## 20 Consider IV fluids under CPO

Quick info:

Commence IV fluids and anti-emetic and complete CPO Advance Form (HB residents only):

- normal saline
- 500-1000ml over 60 minutes
- review hydration status
- if needed, give a further 500-1000ml over 60 minutes or longer
- encourage oral fluids

It is recommended that the IV fluid volume is restricted to an upper limit of 2000ml per consultation. Fluid volumes beyond this level are likely to require more investigation and clinical monitoring and electrolyte management. Should fluid volumes beyond this level be needed, then discussion with the appropriate specialist or hospital admission is required.

Caution to be considered for:

- older adults
- pre-existing heart failure
- unable to manage at home
- prolonged duration of symptoms
- significant co-morbidities
- features of evolving illness
- recent overseas travel

## 21 Deteriorated

Quick info:

Watch for:

- signs of fluid overload
- inadequate response
- persisting fluid losses
- ketosis
- signs of evolving illness

## 22 Improved

Quick info:

Consider review after 24 hours.  
Encourage oral fluids.

## 23 Admission to hospital

Quick info:



# Rehydration of Adults in Primary Care

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Transfer to hospital and contact AAU on-call physician 06 8734812 or 027 7654459 (Mon-Fri 8am-5pm). Out of hours contact triage nurse via switchboard 06 8788109 extn 2623.

## Rehydration Provenance Certificate

### Overview

This document describes the provenance of Hawke's Bay District Health Board's **Rehydration of Adults in Primary Care** Pathway. It was created in September - October 2016 and first published in November 2016. A review of the Pathway is due in November 2018.

The Collaborative Clinical Pathways programme is one initiative stemming from the *Transform and Sustain* agenda. The main aims of CCP are to:

- Identify opportunities to improve how health and disability care is planned and delivered within the district to improve patient access to a wider range of health services that are both closer to home and reduce avoidable hospital admissions.
- Provide health professionals throughout the Hawke's Bay district with best practice, evidence-based clinical pathways that are available at the point of care.

Outcomes we expect to achieve include faster access to definitive care, improved health equity and outcomes, better value from publically-funded resources, and better patient experience through clear expectations, improved access and greater health literacy. These outcomes are clearly aligned to the NZ healthcare *Triple Aim* and *Better, Sooner, More Convenient* policy directions.

### Editorial methodology

This Pathway was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of Medicine editorial methodology. It was developed by individuals with front-line clinical experience (see Contributors section of this document) and has undergone consultation to gain feedback and input from the wider clinical community.

Map of Medicine Pathways are constantly updated in response to new evidence. Continuous evidence searching means that Pathways can be updated rapidly in response to any change in the information landscape. Indexed and grey literature is monitored for new evidence, and feedback is collected from users year-round. The information is triaged so that important changes to the information landscape are incorporated into the Pathways through the quarterly publication cycle.

An update to this Pathway is scheduled for 24 months after first publication. However, feedback is welcomed at any time, with important updates added at the earliest opportunity within the Map of Medicine publishing schedule (the third Friday of each month).

## Contributors

### **The following individuals contributed to the Hawke's Bay localisation of this care map:**

- Alan Wright, General Practitioner, Hastings Health Centre (Primary Care Lead)
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- Anne Bruce, Clinical Nurse Specialist – IV Therapy, HBDHB (Secondary Care Lead)
- Ben Robertson, Clinical Pharmacist, HBDHB

### Map editing and facilitation

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- Louise Pattison, Health Hawke's Bay (Map of Medicine Editor)

## Disclaimers

### **Clinical Pathways Steering Group, Hawke's Bay DHB and Health Hawke's Bay – Te Oranga Hawke's Bay**

It is not the function of the Clinical Pathways Steering Group, Hawke's Bay DHB and Health Hawke's Bay – Te Oranga Hawke's Bay to substitute for the role of the clinician, but to support the clinician in enabling access to know-how and knowledge. Users of the Map of Medicine are therefore urged to use their own professional judgement to ensure that the patient receives the best possible care. Whilst reasonable efforts have been made to ensure the accuracy of the information on this online clinical knowledge resource, we cannot guarantee its correctness and completeness. The information on the Map of Medicine is subject to change and we cannot guarantee that it is up-to-date.