Frailty care guides
Ngā aratohu maimoa hauwarea
He moana pukepuke e ekengia e te waka
*A choppy sea can be navigated by a waka*

In the last few decades as the population has aged, the recognition and treatment of frailty has become crucial to all health care environments. Frailty is now recognised as a clinical syndrome that requires specialised assessment and interventions to promote resilience in people who are ageing and/or those with multiple co-morbidities. These frailty care guides offer practical advice to health care providers to promote the best care possible for this growing population.

As with all guides for practice, these do not replace sound clinical judgement and/or individualised resident goals of care. Rather they promote early intervention and communication with the older person’s multidisciplinary team, particularly their lead primary care provider.

The frailty care guides are based on the registered nurse care guides developed in 2007 through the residential aged care integration workgroup, a collaboration between the Waitematā District Health Board (DHB) gerontology nursing service, older adult and home health services, and leaders and clinicians working and practising in aged residential care. In a national collaboration with the Health Quality & Safety Commission (the Commission), the frailty care guides include expanded and updated clinical information, based on the original care guides information developed for aged residential care. It is intended the guides be used in any setting where people at risk of frailty receive care, including aged residential care, primary health care, community care, hospice and acute hospitals.

There were many people involved in the development of the guides. In particular, the leadership of Janet Parker, gerontology nurse practitioner and leader of the residential aged care integration programme (RACIP) through Waitematā DHB was key. An acknowledgement of those who contributed their expertise and experience to the development of the guides follows.

The Commission is pleased to support the publication of these guides, which will form the basis of future education and quality improvement initiatives within the aged residential care and community sectors. It is intended the guides will be further developed to support the practice of non-regulated care staff and families and whānau caring for their frail loved ones at home.

We hope this is a valuable resource for those caring for older people requiring specialised frailty support.

Dr Michal Boyd
Associate professor and nurse practitioner | University of Auckland, School of Nursing
Clinical lead, aged residential care programme | Health Quality & Safety Commission
### Acknowledgements | He mihi

The many people who have contributed to the development of the frailty care guides are acknowledged below. Many other leaders and clinicians also contributed valuable feedback. Of special note is Janet Parker, who was instrumental in the development of the 2007 registered nurse care guides and has led the RACIP workgroup to complete many valuable resources, including this one. The original 2007 care guides were designed by Denise Berry from Waitematā DHB and her support with the initial design of the frailty care guides is appreciated. The leadership of Carmela Petagna and the Commission team in bringing this project to fruition is also gratefully acknowledged.

**Frailty care guide developers**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Tony Abbey</td>
<td>Waitematā DHB</td>
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<tr>
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**Frailty care guide developers**

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<td>Anne James</td>
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<td>Margaret O’Sullivan</td>
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<td>Joy Owen</td>
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<td>Angela Paraiti</td>
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<td>Janet Parker</td>
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<td>Carole Pilcher</td>
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<td>Carla Powell</td>
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<td>Bernadette Rehman</td>
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<td>Auckland DHB</td>
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</table>
# Contents | Ihirangi

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>1</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>4</td>
</tr>
<tr>
<td>Defining and recognising frailty</td>
<td>7</td>
</tr>
<tr>
<td>Acute deterioration</td>
<td>10</td>
</tr>
<tr>
<td>Gradual deterioration</td>
<td>14</td>
</tr>
<tr>
<td>Last days of life – recognising dying</td>
<td>18</td>
</tr>
<tr>
<td>Advance treatment planning</td>
<td>22</td>
</tr>
<tr>
<td>Enduring power of attorney (EPOA)</td>
<td>25</td>
</tr>
<tr>
<td>Capacity assessment</td>
<td>27</td>
</tr>
<tr>
<td>Communication</td>
<td>30</td>
</tr>
<tr>
<td>Deprescribing and polypharmacy</td>
<td>33</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>40</td>
</tr>
<tr>
<td>Constipation and gastrointestinal</td>
<td>44</td>
</tr>
<tr>
<td>Delirium</td>
<td>49</td>
</tr>
<tr>
<td>Dementia</td>
<td>54</td>
</tr>
<tr>
<td>Behaviours that challenge</td>
<td>57</td>
</tr>
<tr>
<td>Diabetes</td>
<td>64</td>
</tr>
<tr>
<td>Falls prevention</td>
<td>73</td>
</tr>
<tr>
<td>Fractures and contractures</td>
<td>81</td>
</tr>
<tr>
<td>Nutrition and hydration</td>
<td>86</td>
</tr>
<tr>
<td>Pain assessment and management</td>
<td>98</td>
</tr>
<tr>
<td>Respiratory care guide</td>
<td>102</td>
</tr>
<tr>
<td>Skin wounds</td>
<td>105</td>
</tr>
<tr>
<td>Sexuality and intimacy</td>
<td>112</td>
</tr>
<tr>
<td>Syncope and collapse</td>
<td>118</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>121</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>125</td>
</tr>
<tr>
<td>Depression</td>
<td>128</td>
</tr>
<tr>
<td>Bibliography</td>
<td>133</td>
</tr>
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</table>
### Abbreviations

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
</tr>
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<td>Six item cognitive impairment test</td>
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<tr>
<td>ABC</td>
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<td>ABGs</td>
<td>Arterial blood gas</td>
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<td>ACE</td>
<td>Angiotensin-converting-enzyme</td>
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<td>ACER-III</td>
<td>Addenbrooke’s cognitive examination</td>
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<td>ADL</td>
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<td>AF</td>
<td>Atrial fibrillation</td>
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<td>Abnormal Involuntary Movement Scale</td>
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<td>AMT4</td>
<td>Abbreviated mental test</td>
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<td>AR</td>
<td>Anti-regurgitation</td>
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<td>ARB</td>
<td>Angiotensin II receptor blocker</td>
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<td>ASAP</td>
<td>As soon as possible</td>
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<td>BATOMI</td>
<td>Behaviour, affect, thought, orientation, memory/motivation, intellectual functioning/insight</td>
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<td>Blood glucose level</td>
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<td>BM</td>
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<td>Body mass index</td>
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<td>BNP</td>
<td>B-type natriuretic peptide</td>
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<td>bpm</td>
<td>Beats per minute</td>
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<td>Blood pressure</td>
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<td>bpacNZ</td>
<td>Best Practice Advocacy Centre NZ</td>
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<td>BPH</td>
<td>Benign prostatic hyperplasia</td>
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<td>BPSD</td>
<td>Behavioural and psychological symptoms of dementia</td>
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<td>Complete blood count</td>
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<td>CC</td>
<td>Calf circumference</td>
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<tr>
<td>CD</td>
<td>Controlled drug; controlled delivery</td>
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<tr>
<td>CG</td>
<td>Capillary glucose</td>
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<td>CHESS</td>
<td>Changes in health, end-stage disease signs and symptoms scale</td>
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<tr>
<td>cm</td>
<td>Centimetre</td>
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<td>CO₂</td>
<td>Carbon dioxide</td>
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<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
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<td>CRP</td>
<td>C-reactive protein</td>
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<td>CPR</td>
<td>Cardiopulmonary resuscitation</td>
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<td>CR</td>
<td>Controlled release</td>
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<td>CrCl</td>
<td>Creatinine clearance</td>
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<tr>
<td>CRP</td>
<td>C-reactive protein</td>
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<td>CSCI</td>
<td>Continuous subcutaneous infusion</td>
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<td>CSF</td>
<td>Cerebrospinal fluid</td>
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<td>Cornell Scale for Depression in Dementia</td>
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<td>Computerised tomography</td>
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<td>CV</td>
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<td>CVA</td>
<td>AKA stroke: cerebrovascular accident</td>
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<td>CVD</td>
<td>Cardiovascular disease</td>
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<td>CxR</td>
<td>Chest X-ray</td>
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<td>DHB</td>
<td>District health board</td>
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<td>DKA</td>
<td>Diabetic ketoacidosis</td>
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<td>DNR</td>
<td>Do not resuscitate</td>
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<td>Date of birth</td>
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<td>DPP IV</td>
<td>Dipeptidyl peptidase IV</td>
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<td>DSM-III</td>
<td>Diagnostic and Statistical Manual of Mental Disorders III</td>
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<td>EC or EN</td>
<td>Enteric coated</td>
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<td>ECG</td>
<td>Electrocardiogram</td>
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<td>Emergency department</td>
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<td>Electroencephalogram</td>
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<td>eGFR</td>
<td>Estimated glomerular filtration rate</td>
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<td>EPS</td>
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<td>ER</td>
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<td>ESR</td>
<td>Erythrocyte sedimentation rate</td>
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<td>ETOH</td>
<td>Ethanol</td>
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<tr>
<td>FAST</td>
<td>Face, arms, speech, time</td>
</tr>
<tr>
<td>FBC</td>
<td>Full blood count (sometimes fluid balance chart depending on context)</td>
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<tr>
<td>FC</td>
<td>Film or sugar coated</td>
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<tr>
<td>FEV₁</td>
<td>Forced expiratory volume</td>
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<td>FI</td>
<td>Frailty index</td>
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<td>FRAIL-NH</td>
<td>Fatigue, resistance, ambulation, incontinence/illness, loss of weight, nutritional approach, help with dressing</td>
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<td>FWB</td>
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<td>GP/NP</td>
<td>General practitioner/nurse practitioner</td>
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<td>GP cog</td>
<td>General practitioner assessment of cognition</td>
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<td>GTN</td>
<td>Glyceryl trinitrate</td>
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<td>HbA1c</td>
<td>Haemoglobin A1c; glycated haemoglobin; glycosylated haemoglobin</td>
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<td>HHNK</td>
<td>Hyperosmolar hyperglycaemic non-ketotic state</td>
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<td>Hyperosmolar hyperglycaemic state</td>
</tr>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HR</td>
<td>Heart rate</td>
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<td>Herpes simplex virus</td>
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<td>ICP</td>
<td>Intracranial pressure</td>
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<td>ICS</td>
<td>Inhaled corticosteroid</td>
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<td>IDC</td>
<td>Indwelling catheter</td>
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<td>IDDSI</td>
<td>International Dysphagia Diet Standardisation Initiative</td>
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<td>IM</td>
<td>Intramuscular</td>
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<td>interRAI</td>
<td>International Resident Assessment Instrument</td>
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<td>IV</td>
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<td>LA</td>
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<td>LAMA</td>
<td>Long-acting muscarinic antagonist</td>
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<tr>
<td>LGBQTI+</td>
<td>Lesbian, gay, bisexual, transgender, queer, intersexual</td>
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<td>LOC</td>
<td>Level of consciousness</td>
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<td>MDT</td>
<td>Multidisciplinary team</td>
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<td>mg</td>
<td>Milligram</td>
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<td>MI</td>
<td>Myocardial infarction</td>
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<td>ml, mL</td>
<td>Millilitre</td>
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<td>mm</td>
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<td>mmol</td>
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<td>MNA®</td>
<td>Mini nutritional assessment</td>
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<td>MoCA</td>
<td>Montreal Cognitive Assessment</td>
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<td>mol</td>
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<td>MRI</td>
<td>Magnetic resonance imaging</td>
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<td>MSU</td>
<td>Mid-stream urine</td>
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<tr>
<td>NFR</td>
<td>Not for resuscitation</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
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<td>NG</td>
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<td>NPUAP</td>
<td>National Pressure Ulcer Advisory Panel</td>
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<td>NSAIDs</td>
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<td>NWB</td>
<td>Non-weight-bearing</td>
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<td>NYHA</td>
<td>New York Heart Association</td>
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<td>O₂</td>
<td>Oxygen</td>
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<td>Oxygen saturation</td>
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<td>OABS</td>
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<td>obs T, P, RR, BP, O₂ sats</td>
<td>Observations, temperature, pulse, respiratory rate, blood pressure, oxygen saturation</td>
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<tr>
<td>OLDCART</td>
<td>Onset, location, duration, character, aggravating/associated symptoms, relievers, treatment</td>
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<td>Pulse</td>
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<td>PAINAD</td>
<td>Pain assessment in advanced dementia</td>
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<td>PEG</td>
<td>Percutaneous endoscopic gastrostomy</td>
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<td>PG</td>
<td>Psychogeriatric</td>
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<td>pH</td>
<td>Power of hydrogen – measure of acidity or alkalinity</td>
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<td>Polyhexamethylene biguanide</td>
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<td>PHQ</td>
<td>Patient Health Questionnaire</td>
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<td>PI</td>
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<td>Per oral</td>
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<td>PPI</td>
<td>Proton pump inhibitor</td>
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<td>Protection of Personal and Property Rights Act 1998</td>
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<td>PRN</td>
<td>Pro re nata 'as required'</td>
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<td>Physiotherapist</td>
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<td>Partial weight-bearing</td>
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<tr>
<td>QID</td>
<td>Four times a day (Latin quarter in die)</td>
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<td>RN</td>
<td>Registered nurse</td>
</tr>
<tr>
<td>ROM</td>
<td>Range of movement</td>
</tr>
<tr>
<td>RR</td>
<td>Respiration rate</td>
</tr>
<tr>
<td>RUDAS</td>
<td>Rowland Universal Dementia Assessment Scale</td>
</tr>
<tr>
<td>S₃</td>
<td>Third heart sound</td>
</tr>
<tr>
<td>SABA</td>
<td>Short-acting Beta₂ agonist</td>
</tr>
<tr>
<td>SAMA</td>
<td>Short-acting muscarinic antagonist</td>
</tr>
<tr>
<td>SBAR</td>
<td>Situation, background, assessment, recommendation</td>
</tr>
<tr>
<td>SC</td>
<td>Subcutaneous</td>
</tr>
<tr>
<td>SGLT2</td>
<td>Sodium glucose transport protein 2</td>
</tr>
<tr>
<td>SLT</td>
<td>Speech language therapist</td>
</tr>
<tr>
<td>SOB</td>
<td>Shortness of breath</td>
</tr>
<tr>
<td>SPO₂</td>
<td>Arterial oxygen saturation</td>
</tr>
<tr>
<td>SR</td>
<td>Slow release</td>
</tr>
<tr>
<td>SSRI</td>
<td>Selective serotonin reuptake inhibitors</td>
</tr>
<tr>
<td>STML</td>
<td>Short-term memory loss</td>
</tr>
<tr>
<td>T</td>
<td>Temperature</td>
</tr>
<tr>
<td>TIA</td>
<td>Trans-ischaemic attack</td>
</tr>
<tr>
<td>TIME</td>
<td>Tissue, infection, moisture, edge</td>
</tr>
<tr>
<td>URTI</td>
<td>Upper respiratory tract infection</td>
</tr>
<tr>
<td>UTI</td>
<td>Urinary tract infection</td>
</tr>
<tr>
<td>XL</td>
<td>Prolonged release</td>
</tr>
<tr>
<td>XR</td>
<td>Extended release</td>
</tr>
</tbody>
</table>
Defining and recognising frailty | Te tautohu me te kite i te hauwarea

What is frailty and why is it important?

As people age, they can lose their resilience and ability to adapt in the face of multiple disease processes and decreased physical strength and/or cognitive decline. Frailty is not based on the age of a person but on their physical and functional ability. It is a marker of vulnerability and signifies the need for extra care, especially during acute events (even mild ones).

**Frailty can be defined as**

‘A medical syndrome with multiple causes and contributors that is characterised by diminished strength, endurance, and reduced physiologic function that increases an individual’s vulnerability for developing increased dependency and/or death’ (Morley et al 2013).

It is important to recognise decline so that appropriate interventions can be put in place. Physical frailty can potentially be prevented or treated with specific modalities, such as (Morley et al 2013):

- exercise
- protein–calorie supplementation
- vitamin D
- reduction of polypharmacy
- any other intervention that can increase resilience overall.

**How?**

Frailty should be suspected in older people who fall (‘legs gave way’, ‘found on floor’), become immobile (‘gone off-legs’), have new or increased incontinence, are susceptible to adverse medication effects and who present with delirium when unwell (Turner et al 2014).

**Beware**

In the frail, a sudden change in mobility can be a myocardial infarction, stroke or pneumonia, and a fall can be the presenting complaint of many serious illnesses (Turner et al 2014).

It is important to recognise and treat all possible causes of increasing frailty and gradual deterioration before assuming the person has reached the end of their life.
There are two main frailty theories (Clegg et al 2013)

Rockwood
Accumulation of deficits model, based on functional characteristics, as depicted in the clinical frailty above. See example of a frailty index.

Fried – phenotypic model, based on physical characteristics

- Weight loss
- Exhaustion
- Weakness
- Slow walking speed
- Reduced physical activity (Fried et al 2001)
Measuring frailty

There are several ways to measure the level of frailty; one is a ‘frailty index’ (FI), which measures frailty severity.

Rockwood frailty index:
Below is an example of how to determine a frailty index. Total items assessed divided by total number of deficits the person has (Searle et al 2008).

<table>
<thead>
<tr>
<th>Deficits</th>
<th>Range</th>
<th>Frailty index classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–5 deficits</td>
<td>0/26 to 5/26 = 0.0 to 0.19</td>
<td>Non-frail</td>
</tr>
<tr>
<td>6–7 deficits</td>
<td>6/26 to 7/26 = 0.23 to 0.27</td>
<td>Pre-frail</td>
</tr>
<tr>
<td>&gt; 8 deficits</td>
<td>8/26 or more = 0.31 or higher</td>
<td>Frail</td>
</tr>
</tbody>
</table>

**Example – frailty index**

1. Congestive heart failure
2. Cerebrovascular accident
3. Dementia, not specified type
4. Atrial fibrillation
5. Depression defined as PHQ score > 5
6. Arthritis
7. Hip fracture
8. Pressure sores
9. Urinary incontinence
10. Polypharmacy > 6
11. Physical help with dressing
12. Fatigue with self-report or staff observation, included in PHQ > 9
13. No spouse
14. Weight loss
15. Mobility impairment
16. Anything other than a regular diet
17. Bowel incontinence
18. Cancer
19. Renal disease
20. Pneumonia
21. Urinary tract infection
22. Wound infection
23. Diabetes mellitus
24. Malnutrition
25. Psychotic disorder
26. Respiratory failure

**Scoring**

- Non-frail 0.0–0.2
- Pre-frail 0.21–0.29
- Frail > 0.3
Acute deterioration | Te tere tauheke haere

Assessment steps
This tool is to help recognise acute change in older people and provides assessment steps for early intervention.

STOP AND WATCH/assess and review

<table>
<thead>
<tr>
<th>STOP AND WATCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>O</td>
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<tr>
<td>P</td>
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<tr>
<td>A</td>
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<tr>
<td>N</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>W</td>
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<tr>
<td>A</td>
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<tr>
<td>T</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>H</td>
</tr>
</tbody>
</table>

Acute deterioration identified by STOP AND WATCH?
The registered nurse to perform the following assessment and review.
(Review Clinical Reasoning Guide on page 11.)
Then consult with NP/GP using the SBAR tool as a guide for reporting findings.
**Clinical Reasoning Guide**

Start with the **STOP AND WATCH** and then complete reversibility assessment steps 1–8.

- As per **SBAR**: History of the presenting problem. General appearance: pale, sweaty, distracted.
- Full set of obs T, P rates and rhythm, RR, BP, O₂ sats compare all with ‘normal’.
- What is their medical history, and what medication are they on?
- Any recent labs, investigations, new medication?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Review/action</th>
</tr>
</thead>
</table>
| **Step 1** | Review what could be causing the change or decline overall  
  a) Review recent history,  
  b) do observations,  
  c) are there recent medication changes?  
  Review acute deterioration clinical reasoning guide (see next page) and **SBAR form** to review possible causes of symptoms. |
| **Step 2** | Take observations – review warning signs that indicate serious illness or sepsis (see sepsis screening tool)  
  Take into account baseline observations:  
  - Respiratory rate > 24/minute (see **respiratory care guide**).  
  - Increased respiratory rate is one of the most sensitive indicators of acute illness  
  - SPO₂ < 90%  
  - Temperature > 37.7°C or low temp < 36 °C  
  - New heart rate > 100 bpm  
  - New systolic BP < 100 mmHg |
| **Step 3** | Assess for recent labs or other results (eg, X-rays)  
  Consider need for labs: CBC, CRP, electrolytes, creatinine, LFTs, MSU, BGL |
| **Step 4** | Review hydration status  
  - Start input/output chart, ensure input/output equal in 24 hours  
  - Offer fluids orally every 1–2 hours to increase oral fluid intake to 1,000–1,500/24 hours  
  - If unable to take oral fluids, consider normal saline SC (500 ml/12 hrs) and review diuretics (in consultation with prescriber) |
| **Step 5** | Assess for delirium  
  - Delirium screen: Neuro changes, increased falls, functional change and/or confusion.  
  - Neuro assessment: pupils, extremity, power, face and body symmetry, weakness.  
  - See **delirium care guide** and **4AT delirium screen** |
| **Step 6** | Review pain status  
  Assess for pain location, type and severity. Review for pain intervention (use **OLD CART**) |
| **Step 7** | Review for constipation or diarrhoea  
  Bowels not open for three days or watery bowels? Review available laxatives and clear bowels for constipation.  
  Use loperamide and assess for dehydration for diarrhoea |
| **Step 8** | Review goals of care  
  What does the resident/family/whānau want to happen now?  
  Review again after assessment goals of care  
  - For hospitalisation? Antibiotics?  
  - How does the family/whānau feel about the situation? What would they like to happen now?  
  - For comfort care only? If comfort care only, see **palliative care guide** – palliative care is an ACTIVE process  
  - Develop a plan of care based on the above assessment |

(Singer et al 2016; Dellinger et al 2011; Ouslander et al 2011; Boockvar & Lachs 2003)
## Possible causes for specific clinical changes

Below is a tool to help narrow down the clinical causes for acute deterioration.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Symptoms</th>
<th>OLDCART Symptom evaluation tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dizziness</td>
<td>Neurological changes/CVA, Benign positional vertigo, Cardiac changes</td>
<td></td>
</tr>
<tr>
<td>Confusion, change in behaviour</td>
<td>Medication side effects, Delirium, Stroke</td>
<td>Uncontrolled diabetes, Electrolytes imbalance, Depression</td>
</tr>
<tr>
<td>Urinary dysuria, flank pain, lower abdominal pain</td>
<td>Urinary tract infection, Urinary retention, Constipation</td>
<td>Pylonephritis (kidney infections), Medication</td>
</tr>
<tr>
<td>Sleepiness, fatigue, drop in consciousness level</td>
<td>Hypoxia, BGL too low/too high, Hypoactive delirium, Medication</td>
<td>Electrolyte imbalance, Dehydration Infection, Acute cardiac event or congestive heart failure, Neurological change: CVA/TIA</td>
</tr>
<tr>
<td>Fall</td>
<td>Cardiac changes, Dehydration, Urinary tract infection, Lower respiratory tract infection</td>
<td>Neurological event - eg, TIA or CVA, Increasing frailty, Medication changes</td>
</tr>
<tr>
<td>Skin changes, rash or wound</td>
<td>Infection – cellulitis?, DVT?</td>
<td>Allergic/reaction, Bleeding (on warfarin?)</td>
</tr>
<tr>
<td>Shortness of breath (SOB)</td>
<td>Respiratory: COPD or lower respiratory tract infection, Anaemia</td>
<td>Acute cardiac event or congestive heart failure</td>
</tr>
<tr>
<td>Pain</td>
<td>Complete OLDCART, Chest pain, Neurologic</td>
<td>Musculoskeletal, Abdominal, Peripheral neuropathic pain</td>
</tr>
</tbody>
</table>
Sepsis screening tool

Sepsis is a medical emergency

### Known or suspected infection

**PLUS**

- Acute mental status change
- Hyperglycaemia
- Hyperthermia or hypothermia < 36 or > 37.5
- High white blood cell count (or low blood cell count)
- Tachycardia HR > 100 bpm
- Tachypnoea > 24 respiration/minute

*May indicate sepsis – contact GP/NP*

### Any two of the following

**Indications of septic shock or organ dysfunction include**

**POSSIBLE SHOCK**

- Hypotension
- Increasing oxygen requirement (SPO2 > 90%)
- Elevated creatinine (kidney impairment) or bilirubin level (liver impairment)
- Low platelet count
- Petechial rash (tiny purple, red or brown spots on the skin)

### Expected management/treatment of sepsis in aged care facility:

- Oral antibiotic
- Use oxygen to keep SPO2 > 90% if not COPD
- Monitor hydration and urine output
- Pain management
- Monitor labs: CBC, renal function, CRP

### Expected management/treatment of sepsis in hospital:

- IV fluids and antibiotics
- O2 to keep sats > 90% if not COPD
- Bloods: cultures, lactate, renal function, CBC


A template of the modified SBAR tool can be downloaded here: [www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Modified_SBAR_tool_template_example_FCG_final.docx](http://www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Modified_SBAR_tool_template_example_FCG_final.docx)
**Gradual deterioration | Te āta tauheke haere**

**Red flags for gradual deterioration at six-month assessment**

- **Increased falls**
  - Triggered interRAI falls CAP
  - Falls prevention frailty care guide

- **New urinary or bowel incontinence**
  - Triggered interRAI urinary CAP
  - Triggered bowel continence CAP
  - Urinary incontinence and constipation frailty care guides

- **Increased urinary or respiratory tract infections**
  - Review infection rates and antibiotic use
  - Review urinary incontinence, constipation and gastrointestinal, and respiratory frailty care guides
  - Review advance treatment planning frailty care guide

- **interRAI CHESS score**
  - See interRAI CHESS score
  - Review advance treatment planning frailty care guide

- **Frailty score increased**
  - Triggered physical activity CAP
  - See defining and recognising frailty frailty care guide: clinical frailty score or FRAIL-NH
  - Comprehensive assessment to assess for reversibility of any geriatric syndrome

- **Pain**
  - Triggered interRAI pain CAP
  - Review interRAI pain scale
  - Pain assessment and management frailty care guide

- **Non-healing wounds or pressure ulcers**
  - Triggered interRAI pressure ulcer CAP
  - Review interRAI pressure ulcer risk score
  - Skin wounds frailty care guide

- **Weight loss**
  - Triggered interRAI under-nutrition CAP
  - Review BMI interRAI scale
  - Nutrition and hydration frailty care guide

- **Low mood or anxiety**
  - Triggered mood interRAI CAP
  - Review interRAI depression rating scale
  - Review depression frailty care guide

- **New behaviours of concern**
  - Triggered interRAI behaviour CAP
  - Review interRAI aggressive behaviour scale
  - Dementia and behaviours that challenge frailty care guide

- **Delirium episodes**
  - Triggered delirium interRAI CAP
  - Delirium frailty care guide

---

*An important tool to monitor gradual deterioration is to print out the interRAI two-page summary and discuss at the next multidisciplinary review and/or family and whānau meeting.*

*Always review the advanced care plans and goals of care when commencing any plan of care for increasing frailty and gradual deterioration.*
Gradual deterioration assessment tools

Changes in health, end-stage disease, signs and symptoms scale interRAI – CHESS

The CHESS Scale is calculated by adding sign and symptom variables up to a maximum of 2, then adding three other variables (Change in decision making, Change in ADL status, and End-stage disease), giving a highest CHESS score of 5.


FRAIL-NH
A simple assessment of frailty particularly for aged residential care residents. Items from the interRAI assessment can be used as part of this assessment. It also correlates with mortality (Kaehr et al 2016).

<table>
<thead>
<tr>
<th>Frail-NH</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue</td>
<td>No</td>
<td>Yes</td>
<td>PHQ-9 ≥ 10</td>
</tr>
<tr>
<td>Resistance</td>
<td>Independent transfer</td>
<td>Set up</td>
<td>Physical help</td>
</tr>
<tr>
<td>Ambulation</td>
<td>Independent</td>
<td>Walker</td>
<td>Not able/wheelchair</td>
</tr>
<tr>
<td>Incontinence</td>
<td>None</td>
<td>Bladder</td>
<td>Bowel</td>
</tr>
<tr>
<td>Loss of weight</td>
<td>None</td>
<td>Yes</td>
<td>XX</td>
</tr>
<tr>
<td>Nutritional approach</td>
<td>Regular diet</td>
<td>Mechanically altered</td>
<td>Feeding tube</td>
</tr>
<tr>
<td>Help with dressing</td>
<td>Independent</td>
<td>Set up</td>
<td>Physical help</td>
</tr>
<tr>
<td>Total</td>
<td>0–13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-frail (0–5)</td>
<td>Pre-frail (3–7)</td>
<td>Frail (≥ 8)</td>
<td></td>
</tr>
</tbody>
</table>
Identify and treat gradual deterioration

Measure frailty on admission and routine review

Visually identify population frailty from most to least at risk of deterioration

Pre-frail (Frail-NH 0–1)

Frail (Frail-NH 2–5)

Most frail (Frail-NH 5–14)

Standard care

Potential for reversibility/stabilisation

Is there potential for reversibility/stabilisation?

Y

N

Initiate frailty care plan (short-to-long-term plan)

Discuss with resident, whānau, EPOA

NP/GP

Goal of care, ACP, CPR, medication review

Identify and treat frailty progression after acute event

Resident has acute event (trauma or ill health)

Measure frailty 2–4 weeks after acute event

Was deterioration detected?

Y

N

Is there potential for reversibility/stabilisation?

Y

N

Consider referral to allied health, NP/GP

NP/GP

Goal of care, ACP, CPR, medication review
A template of a resident review form can be downloaded here: www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Resident_review_form_FCG_final.docx

Short-term care plan example


<table>
<thead>
<tr>
<th>Start date:</th>
<th>Resident identified as frail – slow (potentially reversible) progression of frailty syndrome. Frail NH score: .............</th>
<th>Goal:</th>
<th>Intervention: How will we do that?</th>
<th>Evaluation: Did it work?</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable gain in lean muscle mass in four weeks</td>
<td>Ensure eats 2g/kg/day protein (sources include milk, supplements, whey powder, meat, nuts)</td>
<td></td>
<td>Monitor food intake (food charting, ‘blue plate’ system, weigh weekly)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess and optimise physiological and psychological issues impacting on eating (includes tooth and gum health, food modification, preferences, timing, assistance, social eating patterns, mood, self-assessed quality of life)</td>
<td></td>
<td>Referral for professional assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work with family regarding additional nutritional treats, eg, trip out to eat, bring food in, extra stuff aged residential care can’t supply</td>
<td></td>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurable gain in strength in four weeks</td>
<td>Physiotherapy assessment for individual activity plan; includes strength and stamina training</td>
<td></td>
<td>Intense support to implement PT plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree small specific daily activities that increase activity</td>
<td></td>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Measure against baseline activity at weekly intervals</td>
<td></td>
<td>Date:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimise medication regime WORK WITH NP/GP TO:</td>
<td>review BP (lower BPs in frail older adults have worse outcomes)</td>
<td></td>
<td>optimise analgesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>consider mental health prescribing (depression worsens fatigue, as does hyponatraemia ADE)</td>
<td></td>
<td>Optimise medical management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>consider vitamin D prescribing</td>
<td></td>
<td>Review and work with NP/GP to optimise chronic condition management (eg, inhalers and SDB, glucose and DM, fluids and HF, rest and sleep cycle, cognition and activities)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Last days of life – recognising dying | Ngā rangi whakamutunga o te oranga – te kite i te matenga**

**Recognition of deterioration – contact GP/NP/family/whānau**

**Assessment**

Two or more of the following (new signs/symptoms) may apply

- Profound weakness or bed bound
- No longer able to swallow tablets
- The person is peripherally shut down
- Person, family or whānau state they are dying
- The person is semi-comatose/unconscious
- Only able to take sips of fluids
- Unable/unsafe to swallow any fluids
- Increased distressing symptoms: shortness of breath, pain

1. **Contact GP/NP**

2. **Review advance care plan, goals of care**

3. **Is this deterioration acute/unexpected?**

4. **Are there reversible cause(s)?**

5. **Is investigation or new intervention appropriate or wanted?**

6. **Treat causes**

7. **Discussion with the person (where appropriate) and relative/whānau/carer to explain current plan of care**

8. **Commence a care plan for the last days of life**

9. **If you require further support/advice, contact your local specialist palliative care service**

**Commence a care plan for the last days of life. This is an active plan requiring frequent review of symptoms and adjustment to the care plan, including daily discussions with the family/whānau**

1. **Family/whānau notified (if not already) of person’s condition. Offer family/whānau involvement in care and allow them to stay over.**
2. **Psychological support: plan of care discussed with person (if appropriate) and family/whānau.**
3. **Spiritual/religious/cultural beliefs: addressed with person and family/whānau – facilitate any identified rituals around death and dying.**
4. **Medication: non-essential medication discontinued, anticipatory prescribing done.**
5. **Discontinue inappropriate interventions: eg, antibiotics, blood tests, vital signs monitoring. Ensure ‘allow for natural death’ – ‘not for resus’ documented.**
6. **All assessment, planning and discussion clearly documented.**

**Note:** refer to organisational policy/Ministry of Health Te Ara Whakapiri (2017).

**Consider non-pharmacological symptom management, eg, aromatherapy, appropriate music as per the person’s request and cultural preferences.**
Assessment and management of symptoms

General principles

- Ongoing holistic assessment of the person (physical, social, cultural, psychological and spiritual) utilising appropriate assessment tools where possible.
- Clearly documented plan of care, care provided and any conversations you have had with the person, their family/whānau and colleagues.
- Assess effectiveness of interventions.
- Ensure medicines are prescribed in anticipation of symptoms occurring, e.g., analgesia, anxiolytics, anti-emetics.
- Decreased consciousness and/or an inability to swallow is common in people who are in their last days of life. Ensure medication is prescribed for subcutaneous administration in anticipation.
- Ensure the person (if possible) and their family/whānau receive appropriate information and reassurance about each symptom and the plan of management.
- If symptoms are not adequately managed, the person requires a medical/NP review.
- If a symptom persists, contact a specialist palliative care service, e.g., hospice, hospital palliative care team.

Pain

- When pain is present, continue with prescribed medication and use an appropriate route.
- Utilise an appropriate pain assessment tool, e.g., Abbey Pain Assessment Tool, PAINAD tool.
- Involve the family/whānau in the assessment process – they may have insights into pain behaviour.
- Right medication for the pain type.
- Provide the person with analgesia prior to providing an intervention that may cause pain, e.g., turning.
- Reposition the person regularly to reduce pain from pressure and muscle contractures (refer to your organisational policy regarding: frequency of repositioning in last days of life).
- 24-hour subcutaneous analgesia.

Nausea and vomiting

- If the person has required regular anti-emetics, ask NP/GP to prescribe medication via a continuous subcutaneous infusion.
- Non-pharmacological interventions include the following: management of odour, fresh air, positioning, might be important to reduce blankets/heavy hot clothing, use of complementary therapies.
- Ensure the person receives excellent mouth care at least 2–4 hourly.
Shortness of breath (SOB)
- When SOB is a pre-existing condition and the person has required low-dose opioids and/or benzodiazepines for its management, continue use of this medication via an alternative route, e.g., continuous subcutaneous infusion – CSCI.
- If SOB is a new symptom, ensure PRN medication is prescribed, e.g., low-dose opioid + or – a benzodiazepine, e.g., midazolam.
- Provide information, reassurance and a calm presence to the person and their family/whānau as SOB can be very frightening.
- Use a cool fan or open window to assist with air movement across the face.
- Oxygen is not usually indicated or helpful unless it is part of the person’s ongoing management.
- Position the person in a way that eases their SOB; most people who are breathless prefer to be sitting slightly upright.

Respiratory secretions during last days of life
- This sound can be a source of distress for family/whānau and caregivers.
- Support with reassurance and a calm presence.
- Be consistent with explanations about the cause and effect of ‘respiratory secretions’ (see last days of life care plan supporting documentation) and alleviate family/whānau concerns that the symptom is not causing distress to the dying person.
- Provide distraction from the sound, e.g., background music.
- Ensure excellent mouth care and encourage family/whānau to be involved.
- Often repositioning the person side to side with the head of the bed slightly elevated helps to shift secretions and reduce the noise.
- Anticholinergics, e.g., hyoscine butylbromide may decrease secretions if commenced at the first sign of the symptom. Side effects include increased risk of urinary retention and increased dry mouth, so if no reduction in secretions this medication should be stopped.
- If secretions are due to an infective cause, anticholinergics are unlikely to be beneficial.
- Tracheal suctioning should be avoided at all times.
- Yankauer suctioning can be used to remove excessive secretions from a person’s mouth.

Agitation, anxiety and restlessness
- Assess for and treat reversible causes of physical discomfort, e.g., pain, full bladder, pressure areas, constipation etc, psychological discomfort, spiritual stress, family/whānau concerns and environment.
- Consider any recent medication changes that could be the cause of the symptom, e.g., dose increases or withdrawal.
- Medication that may be required, e.g., haloperidol (see medication algorithms).
- There is a difference between hallucinations and death-bed visions:
  - Death-bed visions, e.g., the dying person may be seeing someone who is no longer alive; the dying person will appear to be peaceful.
  - Hallucinations can be distressing to the person, seeing something they do not like; may benefit from medication intervention.
Key care principles

Family support
- Make provisions for family/whānau to remain if they wish.
- Ask the family/whānau if they would like private time and provide a space for them.
- Offer cultural, spiritual, psychological support to the family/whānau.
- Offer the family/whānau the opportunity to be involved in care as they wish.

Skin and pressure care
- Keep the skin clean.
- Avoid products that dry or harm the skin.
- Pre-care analgesia given prior to repositioning as indicated.
- Manage wounds.
- Pressure-relieving equipment and regular repositioning.
- Use individual’s preferred position as often as possible.

Mouth care
- Assess mouth and continue mouth care - minimum of 2–4 hourly.
- Decide what mouth swab needs to be used (sponge may be too harsh).
- Offer the family/whānau the opportunity to be involved as they wish.
- Avoid alcohol-based agents for mouth care.
- Mouth care may be done with fluid as per the person’s wishes.
- Consider use of nutritional fluid, eg, miso soup, for cultural consideration.

Eye care
- Eye care should be done a minimum of four-hourly.
- Keep eyes clean and moist.
- Use eye drops/lubrication as prescribed.

Urine output
- Assess bladder for urine retention if person appears agitated.
- Keep person dry and comfortable.
- Use of incontinent products may be beneficial.

Bowel care
- Optimal bowel care prior to last days of life contribute to overall comfort.
- Ensure person is not distressed or agitated by constipation or diarrhoea.
- During the dying phase, when the person is no longer able to take medication orally, bowel management agents are usually not needed unless the person appears agitated/restless.
- If the person becomes agitated/restless, assess and exclude full rectum. Use of suppositories may still be appropriate.
- Contact local palliative care specialist through local hospice, and/or DHB older people’s health and/or DHB mental health services.
Advance treatment planning | 
Te whakamahere ā-mua i te whakamaimoatanga

Understanding the process

Advance treatment planning is a process that gives you the opportunity to plan for health care preferences with the older person, their family/whānau and the health care team. It is a way to capture the wishes of the older person and their family/whānau in the care plan.

It is an ongoing process that should be discussed and updated on a regular basis. It does not have to be a legalised formal process but rather part of the care. Review should be carried out any time there is a change in the resident’s status or at least annually.

All discussions and decisions must be documented, including the date, all personnel involved in the discussion and their status/role.


Modified Let me decide tool for advance treatment planning (adapted from Molloy et al 2000)

- Initiate advance treatment plan discussion with the older person and/or their EPOA
- Reassess on a regular basis as needed and conditions change

Document the following:

- EPOA status
  - Designated EPOA and activation status
- CPR status
  - For resuscitation or ‘do not resuscitate’
- Level of care?
  - Palliative
  - On-site active care
  - Acute hospital care
- Feeding interventions
  - Basic
  - Supplemental
  - Tube (NG or PEG)

Document all discussions and decisions, including the date, all personnel involved and their status/role
Level of care definitions

Comfort care (includes palliative care)
- Do not transfer to hospital unless absolutely necessary (unless for traumatic injury).
- Keep the person warm, dry and pain free.
- Only give measures that enhance comfort or minimise pain.
- Subcutaneous line started only if it improves comfort.
- No X-rays, blood tests or antibiotics unless they are given to improve comfort.
- Care aimed at comfort measures rather than preserving life.

On-site active care
- May or may not transfer to hospital.
- Intravenous therapy may be appropriate.
- Antibiotics should be used sparingly.
- A trial of appropriate drugs may be used.
- No invasive procedures, eg, surgery (unless for traumatic injury).
- Treatment aimed at reducing further health decline as well as enhancing comfort.

Acute hospital care (includes surgical)
- Transfer to acute care hospital if treatment cannot be provided on site.
- Emergency surgery may be appropriate.
- Treatment aimed at preserving life as well as enhancing comfort.

An editable advance treatment plan can be downloaded here:
Initiate the advance treatment planning discussion

Initiate the discussion about care preferences at the time of admission. Find out and follow your facility’s protocol for these discussions.

Special considerations need to be made for residents no longer able to make their wishes known.

Document EPOA status

- Is there a designated EPOA for personal care and welfare?
- Document who the EPOA is in the advance treatment planning document.
- Is there a copy of the EPOA document? If so, check signature, date, etc.
- Has the EPOA been activated?
- The EPOA cannot make decisions regarding end of life and can only provide guidance regarding the resident’s wishes. End-of-life treatment is ultimately a medical decision.

Document CPR status

Discuss with the older person and/or their family/whānau the following:

- **CPR**: use cardiac massage with breathing; may also include intravenous lines, electric shocks to the heart (defibrillators), tubes in the throat to lungs (endotracheal tubes) OR
- **NO CPR**: make no attempt to resuscitate. Allow natural death and do not prolong the dying phase.

Document level/goals of care

Is there an existing advance treatment plan? Discuss if all aspects are still valid and place it in the resident's chart. Under what conditions would the advance treatment plan be activated? See page 23 for level of care definitions.

Document feeding options

Discuss with the older person and/or their family/whānau the following options:

- **Basic**: spoon-feed with regular diet; give all fluids by mouth that can be tolerated but make no attempt to feed by special diets, intravenous fluids or tubes
- **Supplemental**: give supplements or special diets, eg, high-calorie, fat or protein supplements
- **Nasogastric tube**: a soft plastic tube passed through the nose or mouth into the stomach
- **Gastrostomy tube**: (known also as a PEG (percutaneous endoscopic gastrostomy) tube); a soft plastic tube passed directly into the stomach through the skin over the abdomen.

Make sure that wishes are clearly articulated and documented. Avoid using terms such as ‘no heroic measures’ but instead help older people and their families/whānau clearly articulate their care wishes, particularly regarding CPR, feeding and treatment. Discuss level of care and goals of care (examples on previous page).
Enduring power of attorney (EPOA) | Whai Whakamana ā-Ture Mauroa (EPOA)

EPOA personal care and welfare (2019)

Enables the designated person to provide supported decision-making that is in the best interests of the resident about personal care in the event of mental incapacity, eg, the sort of medical treatment the resident would have agreed to if they had the capacity to do so. This may be general or in relation to specific matters.

An EPOA for personal care and welfare has no legal authority unless a certificate of incapacity has been completed by GP/NP or medical consultant.

EPOA assessment/determination

<table>
<thead>
<tr>
<th>Who is it? Ensure there is a copy in the notes and contact details are correct</th>
<th>Y</th>
<th>Does the resident have an EPOA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss with GP/NP</td>
<td>Unsure</td>
<td>Is the resident competent (to make their own decisions)?</td>
</tr>
<tr>
<td>Y</td>
<td>EPOA remains inactive</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Discuss with GP/NP</td>
<td>Has the resident been deemed incompetent by a GP/geriatrician/NP?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

The resident can vary or revoke the EPOA at any time while they are still mentally capable. Appointed EPOA can be challenged if assessed as not acting in the best interests of the patient/resident.
EPOA property

- The designated person can act on the resident’s behalf with respect to property, which includes land, houses, businesses, bank accounts and other possessions.
- Can be general or limited to specific property.
- Can take immediate effect (while still mentally capable) or only in the event of mental incapacity.

‘Mentally incapable’ means

- In relation to personal care and welfare, being wholly or partly unable to understand the nature and foresee the consequences of decisions, or wholly lacking the ability to communicate decisions
- Determination of who can assess for incapacity - a medical or nurse practitioner or medical consultant can do this
- For those without an EPOA and who are mentally incapable, a PPPR may be necessary. The PPPR Act enables a competent adult to appoint another person to make decisions about their personal care and welfare and/or property in the event that they become mentally incapable, see [www.justice.govt.nz/family/powers-to-make-decisions/welfare-guardians/apply-for-a-welfare-guardian/](http://www.justice.govt.nz/family/powers-to-make-decisions/welfare-guardians/apply-for-a-welfare-guardian/) for more information.

Recommend a photocopy of EPOA documents and activation letters is kept in patient file.

For help: refer to DHB community/inpatients social worker.
Capacity assessment | Te aromatawai āheinga

Always presume a person has the capacity to make all decisions for themselves. Never assume a person lacks capacity based on their age, appearance, disability, behaviour, beliefs or diagnosis or disease state. An enduring power of attorney (EPOA) for personal care and welfare has no legal force, unless it has been activated.

Capacity

A person’s ability to make their own decisions, for example, consent to, or refuse, health care. The term ‘competence’ is sometimes used with a similar meaning, as well as ‘decision-making capacity’ and ‘mental capacity’ (Douglass 2016).

Capacity is task specific

Areas where capacity is required include:

- accommodation, selling a house
- consent for treatment or medical care
- refusing medicines or treatment
- nominating an attorney for an EPOA
- testamentary capacity – making a will
- intimate relationships – getting married
- financial management
- driving a car
- capacity to make significant gifts
- contractual capacity – entering a contract.

Capacity is assessed only when there is a combination of major life decisions and reasonable doubt about a person’s ability to understand and communicate/reason, or when there is a ‘trigger’, such as:

- wandering at night
- getting lost while out walking or driving
- car accidents
- displaying behaviour that could potentially harm self or others
- self-neglect – poor attention to personal hygiene
- unpaid bills, unable to manage financial matters
- selling a house and confused about this
- being taking advantage of by others – persuaded to give large assets away that they still require, for example, house, boat, car
- medical investigations and interventions.
Capacity assessment

A clinical interview undertaken by a health practitioner for the purpose of deciding whether a person has decision-making capacity in respect of a specific decision(s). The assessment involves examining the mental processes a person goes through in order to arrive at a conclusion (Douglass 2016).

Involving a team with capacity assessment process

Capacity is decision-specific, therefore assessment and tests will be based on the problem in question.

Involving a team – information from various sources needs to be gathered

- Family – whānau – relatives
- Social workers – information on EPOAs – the attorney’s understanding of their role if the EPOA is activated. How is the attorney going to support the person to continue making decisions? Will the attorney be willing to act on an activated EPOA?
- Occupational therapist – objective assessment of functional status
- Gerontology nurse practitioner/specialist, mental health specialist
- Geriatrician/psychiatrist
- Patient’s general practitioner (is able to assess for incapacity and can activate an EPOA)

How do we test capacity?

We consider and review the following:

- What is the problem in question?
- What functional and decisional capacities are in question?
- Sufficient corroborative information needs to be gathered, for example, relationships, the person’s financial affairs, bill payments.
- Assessment of current mental health state to rule out delirium, depression, psychosis.
- Assessment of cognitive status.
- Temporary activation for acute episodes of delirium or depression to allow treatment to proceed.
The assessment

The person must be told about the purpose of the assessment

When assessing the capacity of a person to make a particular decision, you are considering whether the person can:

• understand the facts involved in the decision
• understand relevant information
• know the main choices that exist
• understand the potential consequences and their effects
• communicate their decision.

Capacity assessment should be the last option in the process after all necessary functional assessments have been completed and all possible solutions explored, for example, moving into residential care against the patient’s wishes.
Communication

Person-centred approaches that recognise the whole person and foster dignity and respect

- Avoid ageist attitudes in communication:
  - Remember that older people feel young on the inside.
  - Be aware of and avoid disrespectful, dismissive language and attitudes, ignoring or ‘talking’ over.
- Avoid baby talk, patronising, infantilising language and tone, or parental ‘bossy’ language and tone of voice.
- Don’t underestimate the older person’s ability to communicate.
- Understand the older person: impaired communicative capacity is frequently interpreted as impaired cognitive capacity.
- Communicate and treat those with cognitive impairment as adults.
- Ensure hearing and vision aids are in place.
- Dedicated orientation and mentoring of new staff to promote:
  - dignity of and respect for residents
  - kind, caring and empathic responses
  - role modelling of respectful and non-ageist communication
  - practical training in use, fitting and maintenance of hearing and vision aids.
Important ways to encourage a cooperative relationship between families/whānau/supporters and professional staff

- Schedule an initial meeting to review plan of care and goals of care with senior nurse, GP/NP or other staff members, family/whānau/supporters and the older person.
- Ask the older person if it is all right to also have a private conversation with family/whānau/supporters. Family/whānau/supporters are often uncomfortable talking about sensitive care issues in front of the older person.
- Provide a written care plan summary (including only the top three to five agreed care priorities), so it is not too overwhelming for family/whānau/supporters.
- Provide regular written or telephone updates to family/whānau/supporters.

Communication strategies

Communication facilitators

- Active listening skills during family/whānau/supporter meetings; if possible, sit down and face the person and be ‘present’ and not distracted.
- Select a quiet place, with dedicated time for meetings, if possible.
- Maintain a relaxed posture, preferably with a pen and paper to write down information. Offer a pen and paper for the listener(s) to write down information.
- Always approach the person with kindness, compassion and empathy.
- Keep a non-judgemental, open mind and project unconditional positive regard to the person you are talking to (no matter how angry or upset they are).
- Don’t interrupt the person while they speak, allow them to finish what they are saying.
- Do not impose solutions; seek solutions together.
- Ask clarifying questions and rephrase the main points, to indicate to the speaker that you really want to understand their views.
- Give regular feedback to the speaker, for example, ‘I see this is very difficult for you’, ‘I can understand your concerns’.
- Summarise the main points after each conversation, for clarification and understanding.
- Decide together two to three actions that will occur from this conversation; write them down. Let the person know when you will get back to them with a progress update.
Communication with families/whānau/supporters

- Fostering a cooperative relationship between family/whānau and other supporters and staff is essential, to provide the best care for frail older people.
- It is important to foster a trusting relationship; the families/whānau/supporters see that concerns are taken seriously and actions are taken.
- It is important that families understand realistically what can be expected in the care of the older person.
- Families/whānau/supporters of frail older people often experience difficult emotions.
- Families/whānau/supporters of frail older people may feel guilty that they cannot provide the level of care the older person requires.
- Guilt can result in hypervigilance and dissatisfaction with care by families/whānau/supporters.
- Families/whānau/supporters may feel angry or resentful about the caregiving responsibilities or feel the care by others is not adequate.
- They may feel grief over the physical or cognitive decline they see in their family member.
- These difficult emotions can sometimes be directed at professional staff members, but this is often not about individual staff members but more about the overall distress of the family/whānau/supporters.

Communication barriers

- Defensiveness shuts down communication.
- Taking criticism personally rather than seeing it objectively and looking for solutions to the problems raised.
- Ignoring concerns or complaints.
- Lack of follow-up of conversations in which concerns were raised.
Deprescribing and polypharmacy | Te whakaiti whakahau rongoā me ngā rongoā takitini

Deprescribing definition

The systematic process of identifying and discontinuing medicines when:

- Existing or potential harms outweigh existing or potential benefits within the context of an individual patient’s goals or current level of functioning.
- When life expectancy is shorter than the time that medication would take to achieve significant effect.

Definition of polypharmacy

Polypharmacy is where the increased number of tablets increases the risk of adverse effect and is an indication for deprescribing.

Multidisciplinary medication review

- Team-based approach to medicines review that includes the prescriber, senior nurse and pharmacist, the patient and their families/whānau/support persons.
- Aim is to identify medication that could be deprescribed and optimise ongoing medicines.
- Decisions to deprescribe should be in line with the patient’s goals of care, and the patient should be involved in the decision-making, as appropriate.
- In residential facilities, this can form part of the resident’s three-monthly review.

When to consider deprescribing

- Patient’s presentation includes problems that could be an adverse medicine effect; commonly falls, confusion, fatigue.
- When there is no clear indication for a medicine, or the indication is no longer clinically relevant – particularly at three-monthly reviews.
- When medicines are being used for prevention (rather than treatment).
- When there has been significant change in health status with new goals of care, such as increased frailty, end-stage disease, terminal cancer.
- Receiving high-risk medicines/combinations, or polypharmacy in general.
Medicines to consider deprescribing in frailty

- Medicines for prevention of future complications: statins, aspirin (primary prevention), antidiabetic medicines
- Antihypertensives
- Proton pump inhibitors
- Anticholinergic medicines
- Sedatives: hypnotics, benzodiazepines, zopiclone
- Antipsychotics for the behavioural and psychological symptoms of dementia (BPSD)

Five steps to deprescribing

1. Ascertain all medicines the patient is currently taking and indication or reason for being on each one. This is best done with a pharmacist and the multidisciplinary team.
2. Consider overall risk of drug-induced harm to determine the appropriate intensity of deprescribing intervention – include consideration of the risks posed by polypharmacy.
3. Assess each medicine for its current benefit, compared with current or future harm/burden potential.
4. Prioritise for deprescribing if:
   a) the medicine being given is for a condition that has resolved or is no better despite the medicine (ie, pain, oedema, dyspepsia, agitation)
   b) the dose can be reduced with no significant risk of deterioration in symptomatic control – aim for the lowest effective dose
   c) the medicine is suspected of causing adverse effects, or expected benefits do not outweigh all the possible known adverse effects
   d) there is a low risk of withdrawal reactions or these can be addressed without consequences to the patient (ie, use of antacids with proton pump inhibitors (PPIs) withdrawal).
5. Implement a discontinuation plan, where multiple interventions are made in a stepwise manner. Monitor patients closely for improvement in outcomes, onset of adverse effects or re-emergence of problems after stopping medicines.
## Deprescribing considerations for priority medicines

### Statins, eg, simvastatin, atorvastatin

**What is the indication for the statin?**
- There is no reason to prescribe or continue statins for primary prevention in frailty.
- Re-evaluate the patient’s risk profile for secondary prevention.
- Consider intensity of treatment needed with respect to life expectancy and ADR risk.

**Factors in favour of deprescribing statin**
- Used for primary prevention.
- Known adverse effects, particularly muscle weakness, which increases falls risk.
- If the person is likely not to live > 5 years.
- If the person has a large number of medicines (high pill burden).
- In secondary prevention when the person has had > 5 years’ treatment and their total cholesterol is low with no further thromboembolic events.

**In favour of continuing statin**
- Used for secondary prevention of CVD and:
  - patient has good quality of life
  - life expectancy > 5 years
  - absence of side effects
  - consider lowest effective dose.
- Recent stroke (past two years) for plaque stabilisation.
- Actively treating peripheral vascular disease where symptoms improve on statin therapy.

### Proton pump inhibitors (PPIs), eg, omeprazole

**Why has this medicine been prescribed?**
- Treatment of medical problem, such as GORD, hiatus hernia.
- Gastro protection due to other medicines (previous or current).

**In favour of deprescribing PPI**
- No current symptoms.
- GORD that has been treated x 4-8 weeks.
- Peptic ulcer disease with known underlying cause removed/treated (NSAIDs, *H. pylori*).
- Prescribed for gastro protection due to other medicines that have or can be discontinued (aspirin, dabigatran, NSAIDs, oral bisphosphonates).
- Mild-to-moderate oesophagitis or reflux that can be managed with antacids.

**In favour of continuing PPI**
- Barrett’s oesophagitis.
- Severe oesophagitis.
- Documented history of bleeding GI ulcer.

**Factors to consider when deprescribing**
- Decrease to a lower dose for a month, to reduce the risk of rebound hyperacidity.
- Aim to establish lowest effective dose.
- Chart PRN antacid.
- After stopping completely, monitor for 4-12 weeks for re-emergence of symptoms: heartburn, epigastric pain, dyspepsia, nausea. In non-verbal patients, look for regurgitation, weight loss, increased agitation or decreased appetite.
Deprescribing considerations for priority medicines continued

### Sedatives and hypnotics, eg, temazepam, lorazepam, midazolam, clonazepam, zopiclone

**Why was the medicine prescribed**
- appropriate uses include

  - seizures
  - alcohol withdrawal
  - refractory anxiety
  - acute agitation in psychosis
  - palliative care, shortness of breath and/or acute ongoing anxiety or agitation.

**In favour of deprescribing sedatives and hypnotics**
- The target symptom is no longer a concern, ie, night sedation but patient is sleeping well.
- Patient has cognitive impairment: benzodiazepines result in five-fold increase in memory problems.
- Mobile patient with high falls risk: two-fold increase in falls/fractures with sedatives.
- Daytime sedation.
- Aim for lowest effective dose.

**Factors to consider when deprescribing**
- Treat underlying issues:
  - poor sleep on beta-blockers, steroids
  - untreated depression
  - untreated anxiety
  - agitation due to constipation or untreated pain.
- Research has shown no improvement in mood and health-related quality of life and somatic symptoms with benzodiazepine use.

**Benzodiazepine tapering guidelines**
- Reduce dose 10 percent x 1–2 weeks until reaching 20 percent of initial dose.
- Then, reduce by 5 percent every 2–4 weeks until off.

### Antipsychotics, eg, haloperidol, risperidone, quetiapine, olanzapine

**Why has it been prescribed?**
- Treatment of long-term mental health disorder (schizophrenia, bipolar disorder).
- Dementia and BPSD.

**Factors in favour of deprescribing**
- Primarily being used for insomnia.
- BPSD treatment > 3 months and symptoms are controlled (aggression, agitation, psychosis).
- BPSD treatment when there has been no change in target symptom(s).
- Adverse effects; postural hypotension.
- Underlying cause of symptom can be identified and treated.

**In favour of continuing antipsychotics**
- Treatment of long-term mental health condition or actively under the care of mental health services.
- Acute delirium (can be stopped as soon as delirium clears (within days), but should never be given for longer than a month).
- BPSD treatment duration < 3 months and patient has responded well to medicine.
- BPSD where withdrawal has been trialled and failed or symptom relapse is considered too risky or unacceptably severe.

**Stopping antipsychotic medicines:**
- Ensure underlying problems are assessed and managed (constipation, UTIs, pain).
- Tapering: 25–50 percent dose reduction over 1–2 weeks with monitoring.
- Develop a non-pharmacology intervention care plan.
Deprescribing considerations for priority medicines continued

### Antihypertensives

#### Why has it been prescribed?
- Prevention of long-term health consequences; stroke, renal impairment in diabetes or cardiovascular protection.
- Active treatment of symptomatic hypertension causing headache, ongoing TIAs/stroke, heart failure, rate control in AF.

#### In favour of deprescribing antihypertensives
- High risk of falls or dizziness, and blood pressure is consistently <140/90 mmHg.
- Hypotension where BP < 120/60 mmHg.
- Orthostatic hypotension – systolic drop of 20 mmHg or more.
- Diuretics for peripheral oedema in absence of congestive heart failure.

#### In favour of continuing antihypertensives
- Blood pressure > 150/90 without treatment.
- History of stroke and BP between 120 mmHg and 140 mmHg on treatment.
- Uses other than solely for BP: beta-blockers for rate control or heart failure, ACE inhibitors after recent MI or heart failure.

#### Factors to consider
- Thiazides can increase incidence of electrolyte abnormalities, dehydration and reduced effectiveness when CrCl < 30 ml/min: deprescribe these first.
- Withdrawal should be gradual at monthly intervals, over 3–6 months.
- Blood pressure goals are higher in the frail – avoidance of systolic BP < 130 mmHg is recommended, and up to 150 mmHg may be appropriate in the very old or frail.

### Anticholinergic medicines

#### Why has it been prescribed?
Many medicines have anticholinergic side effects:
- Antipsychotics: quetiapine, olanzapine
- Antidepressants: amitriptyline, nortriptyline, paroxetine, doxepin
- Antihistamines: promethazine, ranitidine
- Urinary antispasmodic: oxybutynin, solifenacin
- Parkinson’s disease medicines: benzotropine, amantadine

#### Anticholinergic adverse effects
- Confusion and cognitive decline.
- Delirium, hallucinations and agitation.
- Constipation.
- Urinary retention.
- Orthostatic hypotension and blurred vision, increases risk of falls.
- Dry mouth, increases dental caries.

#### Factors in favour of deprescribing
- The patient is experiencing clear anticholinergic side effects.
- The target symptom is no longer a concern; incontinence drugs when pads already in use.
- Burden is high and alternative medicines exist – consider swapping medicines.

#### Factors to consider
- There is an accumulation of side effects with each additional anticholinergic medication.
- Anticholinergic burden can be calculated: [www.acbcalc.com](http://www.acbcalc.com)
- Anticholinergics can cause withdrawal reactions if stopped suddenly; withdraw slowly, where possible.
Crushing medicines

From Waitematā DHB’s Crushing Guide for Oral Medication in Residential Aged Care (www.saferx.co.nz/RAC_crushing_guide.pdf). This is to guide decisions about crushing oral medicines for residents who have swallowing difficulties in residential aged care.

Some medicines should not be crushed because this will alter the absorption or stability of the medicine or it may cause a local irritant effect or unacceptable taste. Sometimes the exposure of powder from crushing medicines may cause occupational health and safety risk to staff. Crushing or altering the medicine is often outside the product licence.

Before crushing – consider:
- alternative medication, formulations, routes
- assessment of swallowing.

Notes:
- When switching to a liquid or alternative formulation there may be a difference in the bioavailability of the medication – do not assume that the dose will be the same.
- Avoid sprinkling crushed tablets or capsule contents onto meals because the meal may remain uneaten.
Effect of crushing tablets – important examples

<table>
<thead>
<tr>
<th>Preparation type</th>
<th>Abbreviations</th>
<th>Notes</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Modified release          |               | Do not crush or chew<br>This medicine is designed to be released slowly (long acting). If crushed, the resident may receive the full dose faster than expected | Diltiazem  
Metoprolol  
Felodipine  
Sinemet |
| Enteric coated            | Usually has | Do not crush<br>The coating may protect the stomach | Aspirin  
Mesalazine |
| Film and sugar coated     | Usually has  | Do not crush (preferably)<br>The coating may be necessary to prevent rapid degradation of the medicine or to mask the taste | Doxycycline (Doxine),  
Morphine sulphate (Sevredol),  
Citalopram (PSM) |
| Pre-scored tablets        | Tablets that have a score line | May be broken along the score line to give half doses but may not necessarily be crushed | Isosorbide mononitrate (Duride)  
Carbamazepine (Tegretol CR) |
| Cytotoxic or locally irritant |               | If crushed, cytotoxic drug powder may be exposed to staff and cause occupational health or safety risk (a). If crushed, irritant medicines may cause irritation/ulceration of the mouth or oesophagus (b). | (a) Methotrexate,  
Finasteride  
(b) Alendronate,  
Risidronate |

Not all medicines can be crushed

- It is important for the RN or carer to inform the prescriber if a resident is unable to swallow medicines whole or is chewing medicines.
- The formulation of medicines change frequently and new formulations may or may not be able to be crushed. The website www.saferx.co.nz is updated monthly with new formulations of medicines.
- Individual medicines can be checked if they can be crushed, and it includes suggestions for alternative formulation for those with swallowing difficulties.

Dabigatran (Pradaxa) caution:

Do not crush, chew or open. Bioavailability increases by 75 percent when pellets are taken without the capsule shell. This will result in an increased risk of bleeding.
Congestive heart failure | Te mate manawa kikī

Always note the cause of heart failure if possible, eg, previous MI, hypertension.

Signs that suggest heart failure

- Tachycardia (heart rate > 100 bpm)
- Third heart sound (S₃) assessed by GP/NP
- Increased jugular venous (JVP > 2 cm)
- Lung sounds - increased crackles in posterior bases (also known as crepitations)
- Pedal (or sacral) oedema
- Heart apical pulse displaced to the left (also known as point of maximal impact – usually 5th intercostal space midclavicular line – not acute sign if this is about acute heart failure exacerbation
- Weight gain - contact GP/NP if > 2 kg in 2-5 days.

Symptoms that suggest heart failure

- Shortness of breath (SOB) on exertion
- SOB when lying down and preferring to sleep sitting up (orthopnoea)
- Waking suddenly in respiratory distress (paroxysmal nocturnal dyspnoea)
- Increased fatigue
- Unexplained cough especially at night
- Acute confusional state – delirium
- Nocturia (increased urination at night; if excessive can be an early warning sign).

New York Heart Association (NYHA) functional classification system for congestive heart failure severity

- **Class 1** – no limitations
  Ordinary physical activity does not cause undue fatigue, dyspnoea or palpitations.
- **Class 2** – slight limitation of physical activity
  Ordinary physical activity results in fatigue, palpitations, dyspnoea or angina pectoris (mild CHF).
- **Class 3** – marked limitation of physical activity
  Less than ordinary physical activity leads to symptoms (moderate CHF).
- **Class 4** – unable to carry on any physical activity without discomfort
  Symptoms of CHF present at rest (severe CHF).
Determine previous history of congestive heart failure

Is there a previous history of congestive heart failure?

- Y
  - Has their condition deteriorated?
    - Y
    - N / Uncertain
    - N
      - Continue with current care plan

Assess for possible causes
- Difficulty with correct amount of drugs, diet, fluid? Review plan for drugs, diet fluid intake with GP/NP
- Weigh resident daily to monitor for fluid retention
- Hazardous drugs? Arrange GP/NP review, consider stopping drugs, eg, NSAIDs
- Acute infection? Arrange GP/NP review, consider antibiotics
- New arrhythmias? Arrange GP/NP review, consider intervention in facility or acute admission or referral, eg, atrial fibrillation
- Acute ischemic/infarction and other causes? Arrange GP/NP review/consider intervention in facility or acute admission or referral, eg, anaemia, embolism, heart attack

Follow orders as per directed by GP/NP
- Often it will be an increase in furosemide, eg, 20 mg furosemide per kg of weight gain
- If no improvement in 24 hours (no weight loss or decrease in signs), contact GP/NP
- If improved in 24 hours (weight loss), provide update to GP/NP

Evaluate complaints of paroxysmal nocturnal dyspnoea, orthopnoea, new onset of SOB on exertion unless there is a clear non-cardiac cause for symptoms

Arrange GP/NP: review and consider acute admission or referral to specialist
- when diagnosis and/or cause is uncertain
- if irregular heart rate, particularly if it is new
- in those with sudden onset of symptoms of heart failure
- when inadequate response to treatment

Is there an individualised care plan for this condition?

- Y
  - Implement care plan
  - Review with GP/NP and revise care plan
- N

Review advance care plan and implement an active palliative approach for all symptoms to improve quality of life
Chest pain

Assess chest pain

**Pain**
- Described as squeezing, tightness, pressure, constriction, burning, fullness in chest, band-like sensation, knot in the centre of the chest, ache, heavy weight on chest
- Sometimes cannot be described but patient places fist in centre of chest known as the 'Levine sign'. Patient may also describe pain as discomfort rather than pain. (Non-ischemic pain may be described as sharp or stabbing.)

**Location**
- Almost always involves the centre of the chest or upper abdomen. Ischaemic chest pain/angina usually not felt in specific spot but throughout the chest. May have difficulty saying exactly where the pain is

**Radiation**
- May include the neck, throat, lower jaw, teeth (feeling like toothache), or the shoulders and arms. May be felt in wrists, fingers or back between the shoulder blades

**Timing**
- Ischaemic chest pain/angina tends to come on gradually and get worse over time: generally lasts 2-20 minutes. Non-ischaemic pain begins suddenly and feels worst in the beginning, usually lasts a few seconds. Pain that has been constant over days or weeks is also not likely to be ischemic chest pain/angina

**Associated symptoms**
- Shortness of breath (dyspnoea), nausea, vomiting or belching, sweating, cold clammy skin, palpitations, fatigue, presyncope, syncope, indigestion, vague abdominal discomfort

**Previous history of chest pain?**

- **Y**
  - Follow prescribed plan, eg, GTN spray
    - One dose under the tongue
    - Second dose 5 mins later if required, and then third dose if necessary
    - If pain persists, seek medical advice immediately
    - If pain settles, inform GP/NP at next appointment
    - If pain is frequent or daily, inform GP/NP immediately

- **N**
  - GTN if there are standing orders
  - Oxygen 4 l/min if prescribed
  - Inform GP/NP/phone 111 if for hospitalisation

**Does the care plan address this issue?**

- **Y**
  - Follow the plan

- **N**
  - Review care plan with GP/NP and revise
Palliative care

Palliative care should be considered for patients with the strong possibility of death within 12 months and who have advanced symptoms, eg, NYHA class 4, poor quality of life, and are resistant to optimal pharmacological and non-pharmacological therapies. Strong markers of impending mortality include:

- advanced age
- recurrent hospitalisation for decompensated heart failure and/or a related diagnosis
- NYHA class 4 symptoms
- poor renal function
- cardiac cachexia (weight loss)
- low sodium concentration (hyponatraemia)
- hypotension necessitating withdrawal of medical therapy
- anaemia
- chronic elevated troponin
- increased BNP.
Constipation and gastrointestinal | Te kōroke me te puku-kōpiro

Maintenance and prevention guidelines
- Assess and treat haemorrhoids and fistulae
- Provide adequate privacy
- Ensure adequate body positioning
- Provide enough time, preferably after meals
- Ensure adequate hydration, dietary intake, fibre/fluid balance
- Review medication, reduce constipating drugs.

Abdominal assessment basics
Listen for bowel sounds over each quadrant:
- Absent?
- < 2–3 per minute (hypoactive)
- 10–30 per minute (hyperactive)
- High tinkling sounds in one area (possible obstruction).

Lightly feel (palpate) abdomen
- Guarding with light touch.

Deeper abdominal palpation:
- Masses?
- Tenderness or pain?
- Note location.

Remember to check for overflow
History of constipation and new, loose or watery stool is likely overflow.

Tip
For consistent constipation use a regular dose of laxative at the lowest dose that works rather than PRN.
Establish resident's normal bowel pattern

Assess for
- Secondary causes
- Acute abdominal pain and possible obstruction
- Delirium (see 4AT assessment)
- Impaction (see next page)
- Rectal bleeding

Contact GP/NP who may follow up with one or more of the following investigations
- Physical exam
- Rectal exam
- Abdominal X-rays
- Blood – FBC, etc
- Stool sample

Suspected constipation

Is this addressed in the individual care plan?
- Implement care plan

First line treatment (days 1-3) assess
- Physical environment (privacy?)
- Seating position favourable for bowel movement
- Non-invasive abdominal exam – bowel sounds, pain with light and deep touch, abdominal masses or lumps (notify GP/NP if abnormal exam result)

Interventions
- Identify and reduce constipating medicines if possible
- Increase fluid and dietary intake (prunes, kiwifruit), Alpine tea
- Laxatives: usually osmotic agent or lactulose-docusate sodium + sennoside B (Laxsol), eg, combination of both
- Complementary treatment can be considered: essential oils, massage
- Maintenance: increase exercise (walking if possible) or stationary exercise

BM?
N Y

Update care plan

Second line treatment (day 4) reassess
- Non-invasive abdominal exam, bowel sounds, pain with light and deep touch, abdominal masses or lumps (notify GP/NP if abnormal exam result)
- Digital rectal exam (DRE) to assess for impaction

Interventions
- Follow facility protocol and discuss with nurse leader and/or GP/NP (eg, glycerine suppository, bisacodyl (Dulcolax), macrogol-3350 (Movicol), Oral Fleet, enema, manual removal)

BM?
N Y

Update care plan

Third line treatment (day 5) reassess
- Non-invasive abdominal exam, bowel sounds, pain with light and deep touch, abdominal masses or lumps (notify GP/NP if abnormal exam result)
- DRE to assess for impaction

Interventions
- Follow facility protocol and discuss with nurse leader and/or GP/NP (eg, glycerine suppository, bisacodyl (Dulcolax), macrogol-3350 (Movicol), Oral Fleet, enema, manual removal)

BM? Y

Update care plan
Medication overview

Types of medication used for constipation

**Bulking agents**, eg, psyllium husk powder (Bonvit, Konsyl-D) – increases faecal mass, which stimulates peristalsis, good for maintenance:

- Requires adequate fluid intake at the time of administration – one full glass of water.
- These agents require 2–3 days to exert their effect and are not suitable for acute relief.
- Avoid if possible in certain conditions, eg, late stage Parkinson’s disease, stroke or spinal injury and existing faecal impaction or bowel obstruction.

**Osmotic agents**, eg, lactulose, macrogols (Molaxole) – promotes secretion of water into the colon, increases frequency of defecation, reduces straining:

- Often the first choice for constipation because they are gentle with few side effects.
- May take a few days to work because it affects the large bowel.

**Stool softeners**, eg, docusate – reduces stool surface tension leading to increased water penetration:

- Good for those with hard stools, excessive straining, anal fissures or haemorrhoids.
- Psyllium has been shown to be more effective than stool softeners for chronic constipation.
- Not a good choice for impaired peristalsis.

**Stimulants**, eg, senna, bisacodyl – increases intestinal motility and colonic secretions:

- Use sparingly because it can result in electrolyte imbalance and abdominal pain.
- Prolonged use and hypokalaemia in rare cases can precipitate lack of colon muscle tone.
- Contraindicated in suspected intestinal blockages.
- Use with opioids.

**Suppositories/enemas** – medicated suppositories should be inserted blunt end first, lubricant suppositories should be inserted pointed end first:

- Lubricated (glycerine): lubricate anorectum, has a stimulant effect. Should be inserted into the faecal mass to aid softening of the mass. No significant side effects.
- Stimulant (glycerol, bisacodyl): must be inserted into the mucus membrane of the rectum and NOT into the faecal mass.
- Osmotic (rectal phosphates): rectal sodium citrate (Micolette enema), phosphate sodium dibasic (Fleet enema).
- Stool softening (docusate sodium): side effects can include electrolyte imbalance and abdominal pain.
Enemas and suppositories

Administration of enema:
- Do digital rectal exam prior to administration.
- Have resident lying left laterally with knees flexed if able.
- Enemas should be at room temperature.
- Use gravity, not force, to administer.
- Please check electrolytes if more than two enemas are given.

Administration of suppositories:
- Do digital rectal exam prior to administration.
- Medical suppositories: insert at least 4 cm into the rectum against rectal mucus membrane, administer lubricant blunt end first.
- For lubricated suppository, administer pointed and into faecal mass, allow 20 minutes to take effect.

Diarrhoea

Assess the following:
- Self limiting, sudden onset diarrhoea
- Food poisoning
- Overflow related to constipation (see DRE guidelines next column)
- Pre-existing medical condition causing diarrhoea
- Overuse of laxatives
- *C. difficile (potentially serious) – recent antibiotics?*
- Treatment: monitor volume and estimate fluid loss and rehydrate
- If symptoms persist (> 3 days duration) request GP/NP assessment.

Digital rectal examination (DRE)
- Obtain consent.
- Observe area for haemorrhoids/faecal prolapse/tears.
- Lying left laterally with knees flexed if able.
- Gloved index finger well lubricated.
- Gently using one finger only.
Manual removal

- Should be avoided if possible and only used if all other methods have failed (or if part of the individual care plan).
- Obtain consent.
- Lying in left lateral position.
- Observe for haemorrhoids/rectal prolapse/tears.
- Take pulse as a baseline.
- Gently use one well lubricated gloved finger.
- Remove small amount at a time and stop if patient is distressed or pulse rate drops.
Delirium | Te mate kuawa

Signs and symptoms

Delirium is a common clinical syndrome characterised by:

- acute onset, hours to days, fluctuating throughout the course of the day
- decreased ability to maintain or shift attention
- changes in cognition or perception
- altered levels of consciousness.

There is frequently more than one aetiology. Not being able to find a cause for delirium does NOT change the diagnosis. The diagnosis is a clinical one.

Signs include:

- decreased ability to maintain and shift attention
- disorganised thinking and speech
- impaired memory (registration and recall)
- illusions, hallucinations (usually visual) and delusions (often persecutory)
- increased or decreased activity
- disrupted sleep–wake cycle
- disorientation in time and/or place
- changes in mood
- fluctuation is common, but typically worse at night.

Delirium characteristics

Who is most at risk?

- Frailty
- Severe illness
- Previous delirium
- Age > 65
- Surgery/trauma
- IV/IDC
- Hip fracture
- Cognitive impairment

Delirium is an acute fluctuating confusional state that can occur when someone is ill or injured.

Delirium is regarded as acute brain failure, where a person’s brain no longer functions as it usually would.

Delirium is a potentially reversible medical emergency that warrants immediate attention.

Prompt identification and assessment of delirium is needed so appropriate interventions can be implemented.
While delirium is potentially reversible, undiagnosed or severe delirium, or delirium occurring in vulnerable people can often be prolonged, leading to permanent functional and cognitive decline.

Delirium is distressing for patients, families/whānau and carers, but with the right care many patients may make a full recovery.

**Causes**

Delirium may result from:

- illness - comorbidities
- infection
- medication changes or polypharmacy
- substance use/withdrawal
- pain
- immobility
- hypoxia or COPD CO₂ retention (O₂ worsens it)
- constipation/dehydration, urinary retention
- environment changes
- vulnerable brain, eg, underlying cognitive impairment/stroke/traumatic brain injury/seizures
- nearing end of life.

**Medication examples that may worsen delirium**

- Anticholinergic medication:
  - Oxybutynin
  - Amitriptyline
- Taking multiple drugs with anticholinergic effects increases risk
- Benzodiazepines and zopiclone
- Opioids
- Antipsychotics
- Steroids.

The following investigations are almost always indicated in patients with acute confusion to identify the underlying causes:

- Full blood count
- Calcium
- Electrolytes
- Liver function tests
- Glucose
- Thyroid function tests
- C-reactive protein
- B12/folate
- Urinalysis/MSU.
If possible and/or in an acute care environment:
- Chest X-ray
- ECG
- Blood cultures.

Other investigations may be indicated according to the findings from the history and examination:
- CT scan, eg, if focal neurological signs, confusion developing after head injury or fall, raised ICP
- Arterial blood gases
- Lumbar puncture (if meningism or headache and fever)
- Sputum

<table>
<thead>
<tr>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your assessment should include</td>
</tr>
<tr>
<td>Pain assessment</td>
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<tr>
<td>Cardiac examination</td>
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<tr>
<td>Respiratory assessment</td>
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<tr>
<td>Abdominal assessment</td>
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<tr>
<td>Nutrition/hydration status</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Neurological</th>
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<tbody>
<tr>
<td>Glasgow Coma Scale</td>
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<tr>
<td>GP cog or 6CIT</td>
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<tr>
<td>4AT</td>
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<tr>
<td>Consider using an interpreter for those who have English as a second language, and remember some patients will revert to first language when delirious</td>
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<thead>
<tr>
<th>Medication</th>
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<tbody>
<tr>
<td>Review all prescribed medicines</td>
</tr>
<tr>
<td>Consider intoxications (measure levels)</td>
</tr>
<tr>
<td>Interactions</td>
</tr>
<tr>
<td>Withdrawal (including alcohol)</td>
</tr>
<tr>
<td>Adverse reactions</td>
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<tr>
<td>Newly added or ceased medicines</td>
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<table>
<thead>
<tr>
<th>Diagnostic tests and investigations</th>
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<tbody>
<tr>
<td>All cases of delirium should be investigated as a matter of urgency, due to the considerable mortality and morbidity associated with this diagnosis</td>
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<tr>
<th>Infective</th>
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<tbody>
<tr>
<td>FBC</td>
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<tr>
<td>ESR</td>
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<tr>
<td>CRP</td>
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<tr>
<td>Urinalysis</td>
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<thead>
<tr>
<th>Metabolic screen</th>
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<tr>
<td>Urea + electrolytes</td>
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<tr>
<td>Glucose</td>
</tr>
<tr>
<td>Liver function</td>
</tr>
<tr>
<td>Creatinine</td>
</tr>
<tr>
<td>Calcium</td>
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<tr>
<th>Chest X-ray and ECG</th>
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<tr>
<td>Review all prescribed medicines</td>
</tr>
<tr>
<td>Consider intoxications (measure levels)</td>
</tr>
<tr>
<td>Interactions</td>
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<tr>
<td>Withdrawal (including alcohol)</td>
</tr>
<tr>
<td>Adverse reactions</td>
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</tbody>
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<thead>
<tr>
<th>History and examination findings should guide the use of these more specific investigations</th>
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<tbody>
<tr>
<td>Metabolic screen</td>
</tr>
<tr>
<td>Magnesium</td>
</tr>
<tr>
<td>B12</td>
</tr>
<tr>
<td>Thyroid function</td>
</tr>
<tr>
<td>ABGs</td>
</tr>
<tr>
<td>Phosphate</td>
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<tr>
<td>Folate</td>
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<tr>
<td>Random cortisol</td>
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<thead>
<tr>
<th>Infective</th>
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<tbody>
<tr>
<td>Serology (HIV, HSV, syphilis)</td>
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<tr>
<td>CSF analysis</td>
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<thead>
<tr>
<th>Neurological</th>
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<tbody>
<tr>
<td>EEG</td>
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<tr>
<td>MRI</td>
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<td>CT</td>
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<tr>
<th>Drugs</th>
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<tr>
<td>Urinary drug screen</td>
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</table>
# 4AT assessment test for delirium and cognitive impairment

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Alertness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This includes patients who may be markedly</td>
<td>Normal, fully alert but not agitated</td>
<td>0</td>
</tr>
<tr>
<td>drowsy (eg, difficult to rouse and/or obviously</td>
<td>throughout assessment</td>
<td></td>
</tr>
<tr>
<td>sleepy during assessment) or agitated/hyperactive. Observe the patient. If</td>
<td>Mild sleepiness &lt; 10 seconds after waking, then normal</td>
<td>0</td>
</tr>
<tr>
<td>asleep, attempt to wake with speech or gentle</td>
<td>Clearly abnormal</td>
<td>4</td>
</tr>
<tr>
<td>touch on shoulder. Ask patient to state their</td>
<td></td>
<td></td>
</tr>
<tr>
<td>name and address to assist rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2 AMT4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age, date of birth, place (name of the hospital or building), current year</td>
<td>No mistakes</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>One mistake</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Two or more mistakes/untestable</td>
<td>2</td>
</tr>
<tr>
<td><strong>3 Attention</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask the patient: ‘Please tell me the months of the year in backwards order, starting at December’. To help initial understanding, one prompt of ‘What is the month before December?’ is permitted</td>
<td>Achieves 7 months or so</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Starts but scores &lt; 7 months or refuses to start</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Untestable – cannot start because unwell, drowsy, inattentive</td>
<td>2</td>
</tr>
<tr>
<td><strong>4 Acute change or fluctuating course</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence of significant change or fluctuation in: alertness, cognition, other mental function (eg, paranoia, hallucinations) arising over the past 2 weeks and still evident in past 24 hours</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
</tbody>
</table>

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: delirium or cognitive impairment unlikely but still possible

4AT score
Nursing management considerations

Nursing management considerations will include ensuring family/whānau and carers receive an explanation of delirium and are included in management strategies where possible.

- Encourage families to bring in personal items and support with care as able.
- Provide a low stimulus, well-lit environment.
- Complete ABC behaviour chart.
- Place falls alarm near bed.
- Consider regular checks or constant observer.
- Manage modifiable risk factors.
- Mobilise, sit in chair for meals.
- Get up, get dressed, get moving.
- Monitor oral intake; aim fluid intake of > 1.2 L/24 hours unless otherwise indicated.
- Monitor bowels.
- Monitor pain; consider Abbey pain scale.
- Monitor skin integrity.
- Reduce catheter/line use where possible.
- Consider medication interactions/review.
- Monitor vital signs.

Consider non-pharmacological strategies, including:

- reorientation – clocks, calendars, newspapers
- look at natural lighting
- avoid multiple transfers within facility
- distraction – consider fiddle mitts/mats/photos/music etc
- keep communication simple – one-step instruction
- consider communication barriers, eg, level of comprehension/language
- maintain restoration of sleep–wake cycle patterns
- ensure visual/hearing aids are used where possible
- monitor behaviour, include what works well and what is a trigger for escalation
- ensure all needs are met, physical, psychological and social
- consider spiritual interventions that would be of comfort to the resident.
Dementia | Te mate wareware

Clinical features of dementia

- **Onset**: Generally insidious and depends on cause
- **Course**: Long, progressive symptoms
- **Progression**: Unpredictable, variable
- **Duration**: Months to years
- **Awareness**: Diminishing, with occasional insight
- **Alertness**: Generally normal
- **Attention**: Can diminish with disease progression
- **Orientation**: Impaired as disease progresses
- **Memory**: Impairment gradually worsening as disease progresses. STML often affected first
- **Thinking**: Difficulty with abstraction, thoughts impoverished, make poor judgements, words difficult to find, lack of cognitive cohesion
- **Perception**: Misperception of themselves and others often observed. Physical depth perception affected.

<table>
<thead>
<tr>
<th>Common dementia types</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s disease</td>
<td>Slow progression, short-term memory loss, word finding difficulties, poor judgement, often experience behavioural and psychological symptoms of dementia (BPSD) at some stage</td>
</tr>
<tr>
<td>β amyloid plaques and neurofibrillary tangles</td>
<td></td>
</tr>
<tr>
<td>Vascular dementia</td>
<td>Step-wise progression, word-finding difficulties, executive function issues, slowed reasoning and impaired problem solving</td>
</tr>
<tr>
<td>Ischemia due cardiovascular disease, associated with stroke and TIA, CT ‘white matter changes’</td>
<td></td>
</tr>
<tr>
<td>Mixed dementia</td>
<td>Occurs when a person has more than one type of dementia, usually Alzheimer’s disease and vascular dementia</td>
</tr>
<tr>
<td>Lewy body and Parkinson’s disease dementia</td>
<td>Movement disorders, visual hallucinations, sleep difficulties, depression, apathy, impaired cognition, poor autonomic regulation (eg, BP, pulse, sweating, digestion)</td>
</tr>
<tr>
<td>Lewy body protein deposits</td>
<td></td>
</tr>
<tr>
<td>Frontotemporal lobe</td>
<td>Personality/behaviour changes, lack of judgement, disinhibition, repetitive/compulsive behavior, decline in personal hygiene, apathy</td>
</tr>
<tr>
<td>Frontal/temporal lobe atrophy, Pick’s inclusions/Tau protein</td>
<td></td>
</tr>
</tbody>
</table>
Dementia is a chronic and progressive loss of intellectual functions severe enough to interfere with everyday life. This could include disturbances to function of the brain including:

- memory
- thinking
- orientation
- comprehension
- calculation
- learning capacity
- language and communication
- judgement.

<table>
<thead>
<tr>
<th></th>
<th>Dementia</th>
<th>Delirium</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Insidious, slow, gradual and relentless</td>
<td>Rapid over a short period, hours to days</td>
<td>Can be sudden or gradual</td>
</tr>
<tr>
<td>Course</td>
<td>Progressive, unremitting and unpredictable</td>
<td>Fluctuates over 24 hours</td>
<td>Often not recognised or misdiagnosed in the elderly</td>
</tr>
<tr>
<td>Duration</td>
<td>Progresses until death unless precipitated by comorbidity</td>
<td>Days to weeks</td>
<td>Self-limiting, may last up to 2 years</td>
</tr>
</tbody>
</table>

Has there been a recent (hours, days, weeks) change or decline in the person’s memory or cognitive functional status? If the answer is YES, consider delirium. Refer to the delirium flow charts to rule out acute causes.

Screening tools to assist in the diagnosis of dementia

- Abbreviated mental test (AMT4)
- Montreal Cognitive Assessment (MoCA)
- Addenbrooke’s cognitive examination (ACER-III)
- Rowland Universal Dementia Assessment Scale (RUDAS).

Care plan – implement person-centred and dementia-centric care

- Treat the person with dignity and respect and maintain privacy.
- Look at situations from the point of view of the person living with dementia.
- Ensure the person has the chance to try new things or take part in activities they enjoy.
- Person-centred care can be a way of preventing and managing BPSD.
- Gain an understanding of their history, lifestyle, culture and preferences. Include their likes, dislikes, hobbies and interests.
- Provide opportunities for the person to have conversations and relationships with other people.
- Family/whānau/carers and the person living with dementia (where possible) need to be involved in developing a care plan that is person-centred.
- Promote the essential psychological needs of people living with dementia: comfort (trust), attachment (security), inclusion (social connection), occupation (meaningful involvement), identity (uniqueness).
Therapeutic communication tool

- Smile
- Slow speech rate and wait for response
- Simple language and avoid jargon
- Specific use names of objects
- Show use gestures or point

Use therapeutic communication

- Ensure they have hearing aids or glasses as needed.
- Assess how cognitive difficulties affect the individual’s communication and adjust yours to help them, e.g., memory, concentration, perception, problem solving, self-monitoring and emotional responses.
- Avoid: appearing cross or angry, controlling behaviour, arguing or ignoring.
- Ensure the environment is safe, structured and important rooms are labelled.
- Promote abilities and remember, when you have met one person with dementia, you have met one person with dementia.

Dementia and palliative care

The needs of a person with dementia are the same as everybody else to maintain quality of life. To do this in a compassionate manner, it is important to get to know the person inclusive of physical, cultural, psychosocial and spiritual needs.

If dementia symptoms are deteriorating or affecting care needs or safety, consider referral to GP/NP, geriatric or mental health services.
Behaviours that challenge | Ngā whanonga uaua

- Using the term ‘behaviours that challenge’ shifts the focus of attention away from individual pathology to finding care solutions.
- Behaviour and psychological symptoms of dementia (BPSD) are problematic behaviours linked to the dementing process.
- Not all behaviours are caused directly by dementia. Many are normal coping strategies used by all people to deal with difficult situations.
- People living with dementia experience changes in their ability to express and resolve their needs.
- People living with dementia respond from their reality, which we cannot change. We can change our approach to support them.

People living with dementia have reduced cognitive abilities that have an effect on:
- Communication
- Memory
- Orientation
- Social connection
- Reasoning
- Thinking
- Logic
- Planning or problem-solving

Their symptoms can cause changes and may increase as dementia progresses, creating new challenges for them and their caregivers:
- Emotions
- Personality
- Mood
- Reactions
- Behaviour
Environment determinants
- Unfamiliar or unstructured environment
- Too large, too small, too much clutter
- Over-/under-stimulation
- No orientation information or cues.

Patient determinants
- Have their basic needs been met?
- Impaired vision or hearing
- Acute illness, dehydration, medication, pain, physical discomfort or constipation
- Effects of fatigue
- Stress, coping abilities
- Expecting unfamiliar tasks beyond their abilities
- Cultural influences, life experience.

Caregiver determinants
- Experience/education/understanding
- Support – financial situations
- Other responsibilities
- Response to stress, resilience
- Adequate breaks, fatigue
- Communication, approach, workplace culture.

Conceptual Model of Behaviour diagram, depicts the many variables that can have an impact on behaviour that challenges (James 2017)
Understanding common, challenging behaviour with solutions for people living with dementia

**Calling out/vocalising**

The need to communicate never goes away. All vocalising behaviour has a meaning – an attempt to communicate or express a need. It may be true distress as a result of feelings of loss and being overwhelmed.

Common triggers include:

- physical: pain, hunger, the need to use the toilet
- environment: too busy or loud, a change in routine, unfamiliar environment, too hot or too cold
- psychological loneliness, boredom, anxiety, depression, delusions.

It can be difficult and frustrating to work out what people with dementia need, and it may seem like they are expressing behaviours that challenge for no apparent reason.

Assess and look for the meaning behind the behaviour.

- Assess, use tools to collect evidence, eg, behaviour charts, pain assessment.
- Identify and remove triggers.
- Don’t ignore the person or talk over them.
- Find out information about them to personalise the response:
  - Attend to the need not the behaviour.
  - Try social interaction and sensory stimulation.
  - Create a low-stimulus environment.
  - Consider relaxing approaches.

**Repetitive actions**

A person living with dementia may do or say something over and over again, like repeating a word, question or activity, pacing, or undoing what has just been done. In most cases they are looking for comfort, security and familiarity. These actions are rarely harmful but can be stressful for caregivers.

- Look for a reason – try to find out if there is a specific cause or trigger for the negative behaviour.
- Focus on the emotion rather than reacting to what the person is doing, respond to how they are feeling.
- Turn the action or behaviour into an activity – if the person is rubbing a hand across a table, provide a cloth and ask for help with dusting.
- Stay calm and be patient – reassure the person with a calm voice and gentle touch (if appropriate).
• Provide an answer – give the person the answer they are looking for, even if you have to repeat it several times. It may help to write it down and post it in a prominent position.
• Engage the person in an activity because they may simply be bored and need a distraction, eg, take them for a walk or engage them in a puzzle.
• Use memory aids – offer reminder like notes, photographs, clocks or calendars.
• Take a break!

If the person is in a safe environment, and you are able to, walk away and take a moment for yourself.

Wandering, walking – common causes
• Memory loss: they may not remember their destination, it may be part of their normal past routine, eg, going to work or meeting a friend
• Physical needs: a need to go to the toilet, pain, hunger, thirst and so on
• Social needs: boredom, loneliness, over- or under-stimulation
• Sleep deprivation: increased mental fatigue, due to lack of sleep, can contribute to confusion and disorientation
• Side effects from medication: can cause disinhibited behaviour and restlessness, which can result in wandering
• Disorientation: confusion regarding time, time and identity, combined with memory loss and an inability to recognise familiar people and environment, may cause wandering in an effort to reach a more familiar and comfortable place.

How you can make a difference
• Provide individualised person-centred care.
• Focus on early intervention and prevention as well as treatment.
• Focus on accurate assessment.
• Develop a culture of caring that prioritises the quality of life.
• Create a social and physical environment that is responsive to changing needs.
• Involve family and friends.
• Reduce stress for the person with dementia.
• Focus on staff education.
• Do more of what works well.

Why people with dementia resist care
• Lack of insight
• Level of cognitive functioning
• A reduced ability to communicate their needs
• They can’t understand what they are being asked to do or how to make it happen
• Mobility and dexterity
• Depression
• Unable to perform complex tasks involving a series of movements or goal-directed behaviour
• Unfamiliar environment
• Fatigue
• Self-defence reaction
• Embarrassment or humiliation
• Loss of dignity or privacy
• Apathy, loss of strength and stamina
• Suspiciousness, there is not enough trust
• Self determination – sense of independence, they may feel they are being bossed about or controlled
• Visual disorders – not recognising or identifying objects
• Design and layout of rooms making access difficult
• People working with them, or they themselves, not knowing how much assistance they need.

**Suspiciousness, blaming, accusing**
Memory and confusion may cause a person living with dementia to perceive things in new and unusual ways. Sometimes they may misinterpret what is seen or heard and become suspicious of those around them, even accusing others of theft, infidelity or other behaviours.

**Don’t take offence**
Listen to what is troubling them and try to understand. Be reassuring, respond to the feeling and let the person know you care.

**Don’t argue or try to convince or correct**
Consider that the accusations may be based on past experiences. What they are experiencing is real to them. Allow the person to express their ideas and acknowledge what was said. Validate their feelings, keep conversations simple. Try to find the underlying reason for their behaviour.

**Switch the focus to another activity**
Engage the person in an activity or ask for help with something.

**Sleeping difficulties**
People with dementia may have problems sleeping. Although the exact cause is unknown, sleep changes can result from the disease’s impact on the brain. Discuss sleep disturbances with a GP/NP, to help in identifying causes and possible solutions.

**Make a comfortable environment**
The sleeping area should be at a comfortable temperature. Use nightlights, and take other steps, to keep the person safe, such as installing appropriate door and window locks.
Maintain a routine (sleep hygiene)
- As much as possible encourage a regular routine of waking up, meals and going to bed at appropriate times.
- Reduce or avoid alcohol, caffeine, nicotine and other stimulants that can all affect the ability to sleep.
- Most experts encourage the use of non-pharmacological measures first, eg, relaxation techniques, hot drinks.
- Discourage screen use during periods of wakefulness at night because it can be stimulating.

Exercise
Physical activity may promote restfulness at night – this may include walking, swimming and so on.

Anger and aggression

VERBAL
Shouting, name calling, swearing, screaming, making threats

PHYSICAL
Hitting, pushing, pinching, scratching, hair pulling, biting

Causes
- Physical
- Over stimulation
- Environment
- Loss of abilities
- Communication

- Pain: Can trigger aggressive behaviour for a person living with dementia.
- Triggers: Think about what happened right before that may have triggered the behaviour.
- Focus on feelings not facts: Look for the feelings behind the words or action.
- Try not to get upset: Be positive and reassuring, speak slowly and in a soft tone.
- Limit distractions: Examine the person’s surroundings and adapt them to avoid similar situations.
- Try a relaxing activity: Use music, massage or exercise to help soothe the person.
- Shift the focus to another activity: If a situation or activity causes an aggressive reaction, try something different.
- Take a break: If the person is in a safe environment, take a break.
- Ensure safety: Make sure you and the person are safe. If the person is unable to calm down, seek assistance from others.
Interventions for behaviour and management

- Look for the causes behind the behaviour.
- Become a detective, not a judge.
- Contributing factors can be reduced or eliminated.
- Address unmet needs.
- Assessment using behaviour charts can provide evidence of frequency, patterns and identify triggers (collect evidence).
- Manage triggers.

Other useful assessment tools

- Cohen Mansfield Agitation Scale
- Abby Pain Scale
- Delirium screen and 4AT, eliminate reversible causes.

How you interact and communicate with the person living with dementia has a direct effect on their behaviour and how they will respond. Use validation diversion and redirection techniques. Address loneliness and isolation.

- Consider: sensory stimulation or a low-stimulus environment, pet therapy and exercise, and use their remaining abilities to occupy them. They respond from their reality, which we cannot change. We can change our approach to support them.

Medication can be considered as a chemical restraint when it is used to manage a person’s behaviour or restrict their freedom of movement. There is now a movement towards reducing the use of antipsychotic medication for challenging behaviour. Non-pharmacological approaches need to be the first method of treatment. Antipsychotics are used when there is evidence of psychosis (delusions or hallucinations) and the person with dementia is in severe distress or harm will be caused to them, those who care for them or other people.

Consider referral to mental health for older people when:

- assessment for dementia of psychogeriatric (PG) level of care is required
- behaviour has been assessed and a delirium screen has been completed with treatment commenced for underlying cause
- the behaviour has not responded to comprehensive non-pharmacological treatments
- behaviour is dangerous, distressing, persistent, disturbing or damaging to social relationships
- medication review/advice of antipsychotic medication is required by a specialist.

Ensure clear reasons are written on the referral, to ensure this is the appropriate service
Diabetes | Te mate huka

Hypoglycaemia

Definition
Capillary glucose < 4 mmol/L in someone who has diabetes and is on a sulphonylurea and/or insulin.

- Type 1 requires insulin every day.
- Type 2 may have a mix of treatments: diet, oral hypoglycaemics and insulin.

Hypoglycaemia signs and symptoms

- Nervousness
- Sweating, chills and clamminess
- Irritability or impatience
- Confusion, including delirium
- Rapid/fast heartbeat
- Light headedness or dizziness
- Hunger and nausea
- Sleepiness
- Blurred/impaired vision
- Tingling or numbness in the lips or tongue
- Headaches
- Weakness or fatigue
- Anger, stubbornness or sadness
- Lack of confidence
- Nightmares or crying out during sleep
- Seizures
- Unconsciousness
- Shakiness.

Hypoglycaemia happens suddenly in minutes to hours.

Treatment of hypoglycaemia in the unconscious person

- IV access
  - 50 mls of 50% dextrose
  - Commence IV infusion 10% glucose at 100 mls/hour.
- No IV access
  - Glucagon 1 mg stat IM
  - If no response after 15 minutes, repeat (effect of glucagon can take 15 minutes and action is short).

When patient is conscious and cooperative, follow advice for conscious person.
Treatment of hypoglycaemia in the conscious person

Capillary glucose < 4 mmol/L

- Hypofit gel sachet
- ½ cup lemonade or
- 4 V/ta glucose tablets or
- 3 heaped teaspoons sugar in water

Give either

Re-test in 5-10 minutes

> 4 mmol/L

- a slice of bread
- a small pottle of yoghurt
- 2 plain biscuits
- or 1 glass of milk,
- or meal if due to be served within 15 minutes

Give either

< 4 mmol/L

Notify GP/NP if capillary glucose not above 4 mmol/L within 30 minutes. Continue with hypoglycaemic treatment.

If unconscious: this is a medical emergency
Check airway in patient and place in recovery position
If no doctor/NP is immediately available, dial 111: do not attempt any oral treatment. Repeat capillary glucose every 5-10 minutes

Over-treatment of hypoglycaemia may result in rebound hyperglycaemia. Do not give insulin to correct high capillary glucose after hypoglycaemic treatment.

Review for cause of hypoglycaemia

- Over-treatment with insulin or sulphonylurea (long-acting sulphonylurea) not recommended for older adults
- Inadequate carbohydrate intake
- Increased physical activity without carbohydrate top-up
- Alcohol consumption
- Increased insulin sensitivity, eg, weight loss
- Reduced renal clearance of medication.
Hyperglycaemia

**Definition:** capillary glucose > 20 mmol/L

- Earliest symptoms: polyuria, polydipsia and weight loss
- Progression is marked by neurologic symptoms, including lethargy, focal signs and altered level for consciousness
- Can progress to coma in later stages.

### Treatment of mild hyperglycaemia in the conscious person

Capillary glucose (CG) > 15 mmol/L?
Recheck CG is 3–4 hours or before next meal
NB: wash patient’s finger before test

- **CG > 15 mmol/L**
  - Patient unwell? Notify GP/NP
  - Increase frequency of CG monitoring and encourage fluids
  - Find cause of illness
  - Check for possible UTI

- **Acceptable level?**
  - CG returned to acceptable range for patient – continue routine care

**If unconscious – this is a medical emergency.**
If no doctor/NP is immediately available, dial 111

*Hyperglycaemic emergencies happen gradually over hours to days.*
Diabetes complications and treatment

<table>
<thead>
<tr>
<th>Diabetic ketoacidosis (DKA)</th>
<th>Hyperosmolar hyperglycaemic state (HHS) known as hyperosmotic hyperglycaemic non-ketotic state (HHNK)</th>
</tr>
</thead>
</table>

**DKA and HHS are two of the most serious acute complications of diabetes**

**Common causes**
- Infection, non-compliance
- Inappropriate adjustment or cessation of insulin
- New onset diabetes mellitus and myocardial ischemia
- Infection or other illness, non-compliance, inappropriate adjustment or cessation of insulin, dehydration, medicines that affect blood sugar

**Plasma glucose**
- > 13.9 mmol/L
- > 33.3 mmol/L

**Urine ketones**
- Positive
- Little or none

**Alertness**
- Progression from alert to drowsy to stupor or coma
- Stupor or coma

**Clinical presentation**
- Usually evolves rapidly over a 24-hour period. May have a fruity odour due to exhaled acetone (like nail polish remover). Deep respirations reflecting compensatory hyperventilation. Hyperventilation and abdominal pain more common
- Develops insidiously with polyuria, polydipsia and weight loss, often persisting for several days. Neurological symptoms are more common

**Physical examination**
- Signs of volume depletion are common in both DKA and HHS and include decreased skin turgor, dry axillae and oral mucosa, low jugular venous pressure, tachycardia and, if severe, hypotension. Neurologic findings may be seen, particularly in people with HHS

**Treatment**
- Both DKA and HHS are **medical emergencies** that require prompt recognition, management and hospital admission (unless at end of life due to other reasons)
- DKA or HHS: vigorous IV electrolyte and fluid replacement to correct hypovolaemia and hyperosmolality, metabolic acidosis (in DKA), potassium depletion, administration of insulin
- Mild DKA can be treated with subcutaneous rapid-acting insulin but only when adequate staffing is available to carefully monitor the patient and check capillary blood glucose hourly

**Geriatric syndromes associated with diabetes**
- Cognitive impairment: diabetes is associated with increased risk of dementia. Cognitive function should be assessed when there is non-adherence with therapy, frequent episodes of hypoglycaemia or deterioration of glycaemic control without obvious explanation.
- Depression occurs at a higher rate compared with age-matched control. Depression is frequently undiagnosed and remains untreated in this high-risk population.
- Polypharmacy is common because of management of multiple risk factors. This increases risk for side effects and interactions. Medication lists should be kept current and reviewed regularly.
- Falls risk is increased and multifactorial. Peripheral and/or autonomic neuropathy, reduced renal function, muscle weakness, functional disability, loss of vision, polypharmacy, comorbidities like osteoarthritis and even mild hypoglycaemia may contribute to falls in frail older adults.
Summary of key recommendations for type 2 diabetes

Older adults with diabetes are a heterogeneous population. They can be fit and healthy or frail with many comorbidities and functional disabilities. They have increased risk for physical decline, cognitive dysfunction and mortality.

Frailty is a prognostic factor that identifies older people with diabetes who are at high risk of mortality. Most will have a high CV risk, and individualised targets need to be realistic and safe.

Lifestyle advice

- Diet focused on glycaemic control, cardiovascular risk reduction and weight reduction, if appropriate, unless frailty is present
- Physical activity, especially walking: exercise also improves body composition and arthritic pain, reduces falls and depression, increases strength and balance, enhances the quality of life and improves survival
- Smoking cessation: smoking in people with diabetes is an independent risk factor for all-cause mortality due largely to CVD.

Glycaemic management

- Goals should be individualised and based on the person’s overall health and projected period of survival, because risk of complications is duration dependent.
- Vulnerability to hypoglycaemia is substantially increased in older adults. Even a mild episode of hypoglycaemia may lead to adverse outcomes in frail older people.
- Oral and injectable agents with low risk of hypoglycaemia are preferred in older adults. ‘Start low and go slow’.
- Monitor blood sugar if the person is taking hypoglycaemic agents or is unwell.

Frailty and age factors to consider when individualising glycaemic targets

<table>
<thead>
<tr>
<th>%</th>
<th>Mmol/mol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6</td>
<td>&lt; 42</td>
<td>Non-diabetic range</td>
</tr>
<tr>
<td>6–6.5</td>
<td>42–48</td>
<td>May be too low for the fit older person</td>
</tr>
<tr>
<td>6.5–7.5</td>
<td>48–58</td>
<td>Appropriate in the fit older person, but be mindful of hypoglycaemia</td>
</tr>
<tr>
<td>7.5–8</td>
<td>58–64</td>
<td>Medication-treated, frail older adults with medical and functional comorbidities and in those whose life expectancy is less than 10 years</td>
</tr>
<tr>
<td>≤ 8.5</td>
<td>64–69</td>
<td>In the very old, efforts should include preserving quality of life and avoiding hypoglycaemia and related complications</td>
</tr>
<tr>
<td>≥ 8.5</td>
<td>&gt; 69</td>
<td>For those at the end of life, there is no benefit to glycaemic control except in avoiding symptomatic hyperglycaemia</td>
</tr>
</tbody>
</table>
 Agents and recommendations

<table>
<thead>
<tr>
<th>Agent</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metformin</td>
<td>• eGFR &gt; 30 ml/min is suggested as a safe level of renal function for the use of metformin</td>
</tr>
<tr>
<td></td>
<td>• eGFR 30–60 mls/min: no more than 1,000 mg/day</td>
</tr>
<tr>
<td></td>
<td>• Caution to stop taking if unwell for any reason or if the person is to undergo a procedure requiring the use of iodinated contrast material</td>
</tr>
<tr>
<td></td>
<td>• Renal function should be monitored every 3–6 months, rather than annually</td>
</tr>
<tr>
<td>Short-acting sulphonylurea</td>
<td>• Use if contraindication and/or intolerance to metformin</td>
</tr>
<tr>
<td></td>
<td>• Avoid long-acting sulfonylureas due to risk of hypoglycaemia</td>
</tr>
<tr>
<td>DPP IV inhibitors and GLP-1 agonists</td>
<td>• Have a marked glucose-lowering effect that reduces post-prandial hyperglycaemia with no additional risk of hypoglycaemia (not subsidised)</td>
</tr>
<tr>
<td>SGLT2 inhibitors</td>
<td>• Generally well tolerated. Improve glycaemic control by reducing glucose absorption and increasing urinary glucose excretion. They do not increase the risk of hypoglycaemia (not subsidised)</td>
</tr>
<tr>
<td>Insulin</td>
<td>• Consider for anyone with HbA1c persistently higher than their individualised target (especially HbA1c &gt; 65 mmol/L) despite optimal oral treatment, particularly if they have signs such as ketonuria and weight loss</td>
</tr>
</tbody>
</table>

Cardiovascular risk reduction

- Older people with diabetes have higher cardiovascular risk, morbidity and mortality, compared with older adults without diabetes.
- Benefit of cardiovascular risk reduction depends on the person’s frailty, overall health and projected period of survival.

Hypertension

- Treatment of hypertension in older people, including those over 80 years, is beneficial.
- Controlling blood pressure decreases the risk of myocardial infarction, heart failure, stroke and all-cause mortality, albuminuria, nephropathy, retinopathy and other microvascular complications.
- An ACE inhibitor is the preferred antihypertensive, an angiotensin II receptor blocker (ARB) is recommended if an ACE inhibitor is not tolerated.
- In older people, pharmacological control of blood pressure to ≤ 130/70 mmHg is not recommended. It has not been shown to improve cardiovascular outcomes. Treating the diastolic blood pressure < 70 mmHg has been associated with higher mortality (page 119 of standards of care).
- Systolic blood pressure < 120 mmHg is associated with increased risk of hypotension, falls and cardiac dysrhythmias.
Dyslipidaemia
- Lipid-lowering: there is a role in secondary prevention for older people. Primary prevention: Should be based on individual clinical judgement. Age alone should not determine whether or not a statin should be prescribed.
- Older people are more likely to gain greater reduction in morbidity and mortality from CV risk reduction with statin therapy than from tight glycaemic control.
- Treatment of dyslipidaemia should be based on life expectancy, comorbidities, cognitive status and personal preferences.
- The risk of myopathy is usually dose related and is increased in the elderly and with combination treatments.
- Low lipid level may be an indicator of poor nutritional status or occult disease, and may reflect increased risk of underlying morbidity and mortality.

Glycaemic control
- Intensive glycaemic therapy in people at high risk for cardiovascular disease, especially with polypharmacy, may increase risk for mortality.
- Check HbA1c 3–6 months and more regularly in those with frequent hypoglycaemia, hypoglycaemic unawareness, frailty or significant comorbidities.

Reduce renal disease
- Control blood pressure. An ACE inhibitor is the preferred antihypertensive (if not tolerated, an ARB is recommended).
- In older people already taking an ACE inhibitor or ARB, it may not be necessary or helpful to continue testing for increased urinary albumin excretion on an annual basis.

Reduce risk for stroke and MI
Aspirin as secondary prevention. Benefit is greatest in those over 65 years.

Prevent vision loss
- Regular eye examinations are extremely important because poor vision can lead to social isolation, an increased risk of accidents and impaired ability to measure blood glucose and draw up insulin.
- A complete ophthalmologic exam should be performed by a qualified ophthalmologist or optometrist at the time of diagnosis and at least yearly thereafter.
- The purpose is to screen not only for diabetic retinopathy but also for cataracts and glaucoma, which are more common in older people with diabetes compared with those without diabetes.
Preventing active foot problems and lower limb amputation

Foot ulcers are an important cause of morbidity in people with diabetes. Both vascular and neurological diseases increase the risk of foot ulcers. Address whether older people can see and reach their feet. If they cannot, another person should do the routine foot inspections.

- No problems: daily visual inspection, plus supportive well-fitting closed shoes, plus podiatry
- Diabetes podiatry review
- High-risk feet (eg, previous tissue loss, deformity, peripheral vascular disease, neuropathy): daily visual inspection, podiatry, custom-built footwear or orthotic insoles
- Peripheral vascular disease and tissue loss: as above, plus refer to vascular specialist, closely monitor wounds, regular wound care
- Clinically infected diabetic foot ulcer: broad spectrum antibiotic
- Cellulitis or osteomyelitis (suspected or present): refer promptly for intravenous antibiotics.

Annual diabetes review (bpacNZ 2015a)

<table>
<thead>
<tr>
<th>Test</th>
<th>Assess at least annually</th>
<th>If moderate to high risk of complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c</td>
<td>✓</td>
<td>✓ 3-monthly</td>
</tr>
<tr>
<td>Blood pressure</td>
<td></td>
<td>At every visit</td>
</tr>
<tr>
<td>Lipid profile</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Feet</td>
<td>✓</td>
<td>✓ 3-monthly</td>
</tr>
<tr>
<td>Retina check</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Albumin: creatine ratio</td>
<td>✓</td>
<td>✓ 6-monthly</td>
</tr>
<tr>
<td>eGFR</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>BMI/weight</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teeth and gums</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Healthy lifestyle advice</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Diabetes medicines - insulin

**Very Short Acting**
*Humalog or Novorapid*
Should be given immediately before meals as prescribed or as required/prescribed for hyperglycaemia.

**Short Acting**
*Actrapid/Humulin R*
Should be given about 20–30 minutes before a meal.

**Intermediate Acting**
*Protaphane/Humulin NPH*

**Peak-less Intermediate Acting**
*Lantus*
*Levemir*

**Pre-Mixed Insulins**
*Penins 30 – Mixtard 30 (30% Actrapid and 70% NPH)*
*Penins 40 (60% Actrapid and 60% NPH)*
*Penins 50 – Mixtard 50 (50% Actrapid and 50% NPH)*
*Humalog mix 25 (25% Humalog and 75% Humulin NPH)*
*Humalog mix 50 (50% Humalog and 50% Humulin NPH)*

Action times vary depending on the mix.
Falls prevention | Te ārai takanga

Definition of a fall

Any unintentional change in position where the person ends up on the floor, ground, or other lower level; includes falls that occur while being assisted by others (interRAI assessment system).

Key messages about fall prevention strategies

- Many falls can be prevented.
- Best practice in fall and injury prevention includes identification of fall risk implementation strategies and targeted individualised strategies that are adequately resourced, monitored and regularly reviewed.
- The outcome of the fall/risk assessment and identified preventative strategies are discussed with the older adult, their family and all health care staff and incorporated into the older adult’s individualised care plan.
- The most effective approach to fall prevention is likely to be one that involves all staff and the use of a multifactorial falls prevention programme.

Falls risk factor

Environmental – request OT and PT assistance

- Unsuitable footwear
- Lighting – levels that cause glare or limit visibility
- Stairs
- Floors, surfaces that cause slips, trips, stumbling
- Patient rooms, clutter and furniture, lack of supports, eg, call bell
- Personal, frequently used items out of reach, eg, glasses, water, reading material
- Bed position, unlocked brakes
- Bathrooms: wet/slick floors, rugs/mats not properly secured
- Seating not individualised to resident’s needs/abilities
- Elevators
- Required medical review if new or ongoing issues suspected despite intervention
- Reduced access to use of assistive devices.
Person centred – request medical review if new or ongoing issues suspected despite intervention

- Increasing age especially > 65 years
- History of falls, eg, two or more in previous months
- Wandering, unsafe behaviour
- Cognitive impairment
- Incontinence, UTIs
- Independent transfers
- Hyper/hypotension especially postural drop
- Impaired balance or weakness especially of lower extremities
- Unsteady gait/use of a mobility aid
- Impaired hearing or vision
- Fever/acute illness, eg, pneumonia
- 24 hours after surgery
- Depression/anxiety/delirium/confusion
- Primary cancer
- Dehydration/poor nutrition
- CHF, heart disease and/or arrhythmias
- Neurological disorders including seizures
- Dizziness, vertigo
- History of alcohol abuse and/or intoxication
- Diabetes.

Medication – request medical review if new or ongoing issues suspected despite intervention

- Over-the-counter and/or prescribed polypharmacy
- Laxatives
- Diuretics and/or increase in dose
- Antiarrhythmics
- Anticoagulants
- Antihypertensives
- Vasodilators
- Sedatives, tranquilisers, psychotropic drugs
- Antidepressants
- Opioids
- Hypoglycaemic agents
- Anaesthetics
- Antisiezure/antiepileptic.
Highest risk of falls
Residents at highest risk of falls are those who are:

- able to stand but need assistance with transfers
- incontinent
- cognitively impaired
- new to the facility.

Comprehensive multidisciplinary falls assessment
To be carried out after any fall:

- Health history and functional assessment
- Medication and alcohol consumption review
- Vital signs and pain assessment
- Vision screening
- Gait and balance screening and assessment
- Footwear assessment
- Musculoskeletal and foot assessment
- Continence assessment
- Cardiovascular assessment
- Neurological assessment
- Depression screening
- Walking aids, assistive technologies and protective devices assessments
- Environmental assessment
- Cognitive assessment
- Falls history including causes and injuries consequences
- Syncope syndrome
- Osteoporosis risks.

![Restraints are not a method of fall prevention – retrain but do not restrain.](image)
Identify falls risk factors that can be treated, improved or managed

Components of a falls prevention programme

- Initial assessment of all residents to identify their falls risk and develop a care plan with interventions for their individual risk factors.
- Risk assessment factors entered into all residents’ health records.
- Ongoing reassessment for causes, factors and falls as part of a three-monthly clinical review or sooner if further falls, change in health status or change in environment.
- Appropriate prevention/intervention plan implemented for all residents.
- High-risk residents may be identified at the bedside with a ‘fall symbol’ and will have the ‘high-risk’ interventions implemented as appropriate.
- Consider referral to specialised gerontology service.
- Documentation of all falls and completion of incident report.
- Measuring and monitoring of fall rates/injury rates.
- Monitor and audit uptake of falls programme, eg, hip protection, vitamin D uptake, exercise programme participation, staff education.
- Attention to the environment: lighting, flooring, furniture, bathrooms and toilets.
- Staff education programmes.

Falls prevention process

1. Plan
2. Implement
3. Evaluate

Ensure standard fall prevention strategies are in place

Conduct individual assessment

Implement targeted individualised fall and injury prevention interventions

Review and monitor

Involve the resident and their carers
Falls preventions/interventions for individual residents

- Restraints: avoid or ensure awareness of risk
- Staff education and high level of awareness of each resident’s falls and risk factors
- Resident education, eg, personal limitations and asking for assistance
- Individualised care plans and intervention programmes
- Attention to vision/visual aids, eg, annual review, use correct glasses for mobilising
- Orientation and reorientation to environment and how to obtain assistance
- Agitation, wandering and impulsive behaviour – recognise and eliminate or reduce factors that precipitate these behaviours
- Regular case conferences including all caregivers, nursing, medical and allied health staff
- Regular review of medication for elimination or dose reductions (aiming to maximise health benefits while minimising side effects, eg, falls)
- Work alongside and with high-risk residents, increasing assistance to them as needed
- Exercise – encourage participation in exercise programmes for improving balance
- Wellbeing – encourage participation in exercise programmes for improving balance
- Well fitting non-slip footwear and treatment of any foot problems – refer to a podiatrist
- Continen ce management – (bowel and bladder) as required
- Adequate fluid and nutrition – ensure fluid readily available
- Attention to environmental issues – general and individualised, which includes:
  - specialised advice on assistive and mobility devices
  - correct use of moving and handling equipment
  - MDT approach with management, including occupational assessment/activity/task analysis
- Hip protectors – consider the use of hip protectors amongst those clients considered at high risk of fractures associated with falls (there is no evidence to support universal use of hip protectors amongst the older adult in health care settings)
- Vitamin D is associated with a reduction in falls and fall-related fractures.

Value of exercise

Exercise to improve balance, strength and gait is a key component of fall prevention programmes.
Post-fall assessment


No apparent injury
- Alert
- No pain
- No wounds or bleeding
- No limb deformity
- Mobility unaffected
  - Assist resident to a comfortable place (using hoist/manual handling aid)
  - Observe for 24 to 72 hours (observation/neurology) per facility protocol
  - Inform relatives
  - Post-fall review GP/NP
  - Complete facility post-fall protocols/incident forms

Minor injury
- Minor bruising
- Minor skin wounds
- Mild discomfort
  - Assist resident to a comfortable place (using hoist/manual handling aid)
  - Observe for 24 to 72 hours (observation/neurology) per facility protocol
  - Treat minor wounds, pain relief medication
  - Post-fall review GP/NP
  - Complete facility post-fall protocols/incident forms

Major injury
- Airway or breathing problems
- Loss of consciousness or unresponsive
- Acute confusion
- Suspected head injury to resident taking anticoagulant (warfarin/dabigatran)
- Head injury or trauma
- Pain in limbs or chest
- Bleeding or extensive bruising
  - Do not move the resident (except for resuscitation)
  - Call 111 for ambulance
  - Inform relatives and record the discussion
  - Complete facility post-fall protocols/incident forms

Observation
- Temperature, SPO2, pulse, respiration rate, sitting and standing BP

Neurology assessment
- Pupils equal and reactive, no changes in Glasgow Coma Scale

If any changes are causing concern, phone GP/NP or 111.
### Glasgow Coma Scale

<table>
<thead>
<tr>
<th>Eye opening (E)</th>
<th>Verbal response (V)</th>
<th>Motor response (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = Spontaneous</td>
<td>5 = Orientated</td>
<td>6 = Obey commands</td>
</tr>
<tr>
<td>3 = To voice</td>
<td>4 = Confused</td>
<td>5 = Localises to pain</td>
</tr>
<tr>
<td>2 = To pain</td>
<td>3 = Words, but not coherent</td>
<td>4 = Normal flexion</td>
</tr>
<tr>
<td>1 = None</td>
<td>2 = No words, only sounds</td>
<td>3 = Abnormal flexion</td>
</tr>
<tr>
<td></td>
<td>1 = None</td>
<td>2 = Extension</td>
</tr>
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See: [www.glasgowcomascale.org](http://www.glasgowcomascale.org)

Total = E+V+M

---

### Post-fall assessment


Medication drill-down

Review contributing factors related to medication

Medication

- New medication?
- Changes? (Dose, time, etc)
- When was last dose given?
- Has there been a medical error in the past 24 hours

General contributing factors

Did resident exhibit signs or complaint of:
- weakness
- acute delirium
- clammy skin
- gait disturbance
- dehydration
- impaired vision
- agitation
- impulsiveness
- resistance to care

Other medical-related contributing factors to consider

Review for:
- drug–drug
- drug–food
- drug–supplement
- drug–herb

Side effects

Interactions

Diuretics

- Edema (lower extremity)
- Lung status (CHF)
- Change in urgency and void
- Change in fluid (72 hours)

Psychopharmacology

- Antianxiety
- Antidepressant
- Antipsychotic
- Hypnotic

Antihypertensives/cardiovascular

- Baseline blood pressure
- Postural blood pressure
- Vital signs including O2 sats
- Skin – is it cold or clammy?

Antipsychotics only

- Check most recent AIMS
- Consider EPS (involuntary movement)

Hypo/hyperglycaemic

- Time of last insulin/oral
- Agent dose
- CG results
- Last PO intake (time and quantity)
- Skin – is it cold and clammy?

Laxatives

- Prescribed and given?

Narcotics/analgesics

- Pain level:
  - at last dose
  - at time of fall

Antibiotics

- Diagnosis for use (UTI, pneumonia)

Consult pharmacist or physician (as appropriate)

If immediate risk identified
take steps to ensure resident’s safety and prevent re-occurrence
Fractures and contractures | Ngā whati me ngā kukuti uaua

Risk factors for fractures
- Falls
- Osteoporosis
- Advanced age
- Previous fracture
- Living in residential care
- Glucocorticoid therapy
- Parental history of hip fracture
- Low body weight
- ETOH overuse
- Rheumatoid arthritis
- Diabetes mellitus
- Cognitive impairment
- Psychotropic medication use
- Low serum vitamin D
- Bowel or bladder incontinence
- High serum phosphate
- Current smoker.

Acute fracture presentations
- Acute pain
- Decreased range of movement
- Decreased circulation
- Deformity of limb, shortness, rotation
- Haematoma/oedema.

Action plan
- Go to hospital (call 111 for ambulance). Notify GP/NP/family/EPOA.
- Immobilise site.
- Monitor swelling, neurovascular observations.
- Minimise pain at the fracture site during and after immobilisation.
- Provide adequate analgesic.
- Treat shock.
- Provide a calm and secure environment for the patient/resident.
- Open fractures (those open to air) represent orthopaedic emergencies.
Risk factors for contractures
- Advanced age
- Neurological conditions such as stoke or brain injury
- Orthopaedic injury
- Spinal cord injury
- Diabetes.

Contracture presentations
Joint contractures are restrictions in full range of motion of any joint due to deformity, disease or pain. They are common in frail older adults, especially those in residential care facilities. They can cause:
- reduced motion and stiffness of the joint
- loss of physical function and ability to perform ADLs
- increased risk of falls, immobility and bed confinement
- pain
- increased risk of pressure injury.

Action plan
Multidisciplinary team coordination for ongoing management of contracture:
- Referral to physiotherapist for functional assessment EARLY for prevention and management. Advice on joint exercise, mobility, handling techniques and positioning
- Occupational therapy for pressure-relieving equipment and/or equipment to help with ADLs. Advice on daily activities of living and promotion of independence
- Continued nursing assessment of skin, continence and pain management. Encourage high-energy diet. Nurse patients/residents using pillows to minimise flexion at the hip and knee and adduction and internal rotation at the shoulder. Wheelchair positioning should maintain normal lumbar curvature. Frequent repositioning prevents skin breakdown and pressure injury as well as further contractures
- Consideration of referral to orthotics for splints or other orthotic devices.

Potential complications of fractures
- Severe haemorrhage, especially from hip and pelvic fractures
- Deep vein thrombosis and pulmonary contusion, especially from hip and multiple rib fractures. Thromboprophylactic treatment is indicated in most cases of orthopaedic trauma
- Acute compartment syndrome, especially from long bone fractures
- Damage to vascular structures, nerves or soft tissue as a result of trauma
- Osteomyelitis
- Non-union (where the normal process of bone healing is interrupted or stalled)
- Post-traumatic osteoarthritis.
Non-pharmacological approaches to fracture prevention
- Falls risk screening with regular follow-up
- Hip protectors
- Exercise
- Environmental assessment to maintain safety
- Avoid restraint
- Increased dietary calcium.

Pharmacological approaches to fracture prevention
- Vitamin D supplementation is recommended for all people in residential care facilities.
- Bisphosphonate therapy is the first choice pharmacological agent for fracture prevention in older adults at high risk.
- De-prescribing of medicines that can increase the risk of falls.

Bisphosphonate therapy
- Bisphosphonate therapy can be used for both primary and secondary prevention of osteoporotic fractures.
- Bisphosphonate therapy can be administered orally or via intravenous infusion.
- Oral treatment available in New Zealand includes Risedronate (does not require special authority and fully subsidised) and Alendronate. IV treatment is Zoledronic acid 5 mg given 18–24 months.

Administration of bisphosphonates
- Oral bisphosphonates are usually given weekly.
- Oral bisphosphonates must be given by themselves and on an empty stomach. Early morning administration prior to other medication and food is best. Must be taken with a large glass of water. Person must be able to sit or stand upright 30 minutes post-administration. This allows for maximum absorption and reduced GI side effects. Consider IV administration if oral administration guidelines cannot be adhered to.
- Patients having IV Zolendronate – 25 percent will have an acute phase reaction post-administration. This presents as flu-like symptoms and can be managed with paracetamol.
- IV bisphosphonates are given 18–24 months and should be reviewed after 3 years. Oral bisphosphonates should be reviewed after 5 years and considered for a ‘drug’ holiday.
- Caution in renal impairment. Avoid bisphosphonates if creatinine clearance is less than 30–35 mL/min.
- Oral bisphosphonates should not be used in people with dysphagia.
- Adverse effects can include GI upset, as well as rare but serious side effects, such as atypical femoral fractures and osteonecrosis of the jaw.
Cast care

- Ensure the casted limb is maintained and supported in an appropriate position at all times.
- Adhere to written medical instructions.
- Observe and record where necessary in the clinical notes whenever there is a change in fracture management:
  - neurovascular state of the casted limb
  - check extremities for colour, warmth, sensation, capillary refill and distal pulses
  - check support and elevation as appropriate
  - check for painful pressure or movement
  - document findings.
- Observe the patient for signs and symptoms of compartment syndrome.
- Assess safety, elimination and skin integrity.
- Advise patients regarding toilet, hygiene and importance of keeping cast dry, refer to occupational therapist for equipment assessment if necessary.
- Offer supervision by careful positioning of patient, bedpan/urinal.
- Caution patients against the use of heaters and hair dryers on the cast due to the danger of burning underlying skin.
- Ensure mobility status is documented in notes, eg, NWB/PWB/FWB.
- Physiotherapy and occupational therapy are initiated as appropriate.
- Sling or collar and cuff used to support upper limb injuries.

Casts should be inspected at least once a shift:

- Assess skin integrity at the edges of the cast for signs of friction or rubbing.
- Observe for any of the following: localised burning, itching, swelling, odour and discharge.
- Check for any dents, cracks, soft spots or looseness.
- Back slabs may only be removed for wound observation and management following consultation with the medical team.
Compartment syndrome

- The following signs and symptoms may indicate compartment syndrome, which is a medical emergency:
  - Increasing pain not relieved by analgesia
  - Sensory changes
  - Pain on passive movement
  - Pallor or cyanosis
  - Absent distal pulse.
- After consultation with medical team, split the cast through to the skin, lower the limb to the level of the heart and undertake 15-minute observations.

Send to hospital and notify GP/NP, orthopaedics and family/EPOA.

Cast repairs

- Cast repairs are managed through the orthopaedic outpatients, Monday to Friday 8 am to 5 pm.
- After hours repairs will be done in ED.

ROM braces

A range of motion/movement (ROM) brace provides knee immobilisation or range of movement limitations as prescribed by a medical practitioner. It may be used post injury, post operatively or throughout rehabilitation. Ascertain from the clinical notes the range of motion allowed. If the brace is to be locked in ‘extension’, set the dial on the side of the brace to 0 degrees extension and 0 degrees flexion. If the patient is only allowed a certain degree of flexion, lock the brace at that degree (as per doctor’s instructions) on the two side dials/hinges.

Education and care for ROM braces

- Wash the soft, grey foam with warm soapy water in the washing machine. The foam can be dried in the drier with an anti-static sheet.
- Cover the brace with a plastic bag when the patient is showering.
- If the patient is able to keep their leg straight and non-weight bear, the brace can be removed during showering. This decision will be guided by the clinical assessment made by the team responsible for the patient.
- Can patients remove the brace overnight? This decision will be guided by the clinical assessment made by the team responsible for the patient.
Nutrition and hydration | Te taioranga me te miti wai

Seek family involvement at meal times

Identify and rule out contributing causes

- Environmental issues
- Food preferences – food and fluid of choice
- Dentition and oral health
- Dysphagia/SLT referral
- Mental health – depression?
- Faecal impaction
- Infection – UTI/URTI/GI
- Decline in ADL/mobility
- Requires increased assistance
- Medication – iatrogenic causes
- Underlying pathology GI disturbance.

Common risk factors for malnutrition and dehydration

- Physical limitations: difficulty obtaining and preparing food, manual dexterity
- Sensory perception: decreased sense of taste and smell, impaired vision and hearing
- Socioeconomic: isolation, bereavement, lack of nutritional knowledge, poverty, institutionalisation
- Food restrictions: self-imposed or due to health conditions
- Acute illness, diarrhoea and vomiting
- Oral health/hygiene problems (dentures, tooth loss or poor dental health)
- Impaired ability to chew and swallow, or dysphagia
- Medication
- Drugs and alcohol
- Chronic disease processes
- Underlying pathology
- GI disturbances/faecal impaction
- Decreased thirst
- Cognitive impairment/confusion
- Decreased motivation, fatigue or apathy
- Requiring assistance with foods and fluids
- Older age
- Mental health – depression
- Incontinence.

Signs of malnutrition

- Lack of appetite or interest in food or drink
- Tiredness and irritability
- Inability to concentrate
- Always feeling cold
- Loss of fat, muscle mass and body tissue
- The cheeks appear hollow and the eyes sunken, as fat disappears from the face
- Higher risk of complications after surgery
- Longer healing time for wounds
- Higher risk of getting sick and taking longer to heal
- Breathing becomes difficult
- Skin may become thin, dry, inelastic, pale and cold
- Hair becomes dry and sparse, falling out easily.
**Refusal to eat**

- Assess personal preferences and whether the resident is enjoying their meals
- Discuss care plan with the family/whānau/EPOA
Use mini nutritional assessment (MNA®) below
Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.

<table>
<thead>
<tr>
<th></th>
<th>Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 = severe loss of appetite</td>
</tr>
<tr>
<td></td>
<td>1 = moderate loss of appetite</td>
</tr>
<tr>
<td></td>
<td>2 = no loss of appetite</td>
</tr>
<tr>
<td></td>
<td>Score enter</td>
</tr>
</tbody>
</table>

|   | Weight loss during past 3 months                                                                                        |
| B |                                                                                                                           |
|   | 0 = weight loss greater than 3 kg                                                                                       |
|   | 1 = does not know                                                                                                       |
|   | 2 = weight loss between 1 kg and 3 kg                                                                                   |
|   | 3 = no weight loss                                                                                                       |
|   | Score enter                                                                                                              |

|   | Mobility?                                                                                                                |
| C |                                                                                                                           |
|   | 0 = bed or chair bound                                                                                                  |
|   | 1 = able to get out of bed or chair but does not go out                                                                 |
|   | 2 = goes out                                                                                                             |
|   | Score enter                                                                                                              |

|   | Has suffered physical stress or acute disease in past 3 months?                                                        |
| D |                                                                                                                           |
|   | 0 = yes                                                                                                                  |
|   | 1 = no                                                                                                                   |
|   | Score enter                                                                                                              |

|   | Neuropsychological problems?                                                                                             |
| E |                                                                                                                           |
|   | 0 = severe dementia or depression                                                                                        |
|   | 1 = mild dementia                                                                                                        |
|   | 2 = no psychological problems                                                                                           |
|   | Score enter                                                                                                              |

| F1 | Body mass index (BMI) (weight in kilos)/(height in metres)                                                                |
|    |                                                                                                                           |
|    | 0 = BMI < 19                                                                                                              |
|    | 1 = BMI 19 to < 21                                                                                                        |
|    | 2 = BMI 21 to 23                                                                                                          |
|    | 3 = BMI > 23                                                                                                              |
|    | Score enter                                                                                                              |

If BMI is not available, replace question F1 with question F2. Do not answer question F2 if question F1 is already completed.

| F2 | Calf circumference (CC) in cm                                                                                           |
|    |                                                                                                                           |
|    | 0 = CC less than 31                                                                                                     |
|    | 3 = CC 31 or greater                                                                                                    |
|    | Score enter                                                                                                              |

Screening score (subtotal max 14 points)
12-14 points: Normal nutritional status
8-11 points: At risk of malnutrition
0-7 points: Malnourished

Total score enter
Consequences of malnutrition in the elderly

- Infection
- Pressure ulcers
- Anaemia
- Hypotension

Malnutrition

- Confusion
- Decreased wound healing
- Impaired cognition
- Increased bone fractures

Calculating healthy weight/height range

**Estimating height from ulna length**
Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

<table>
<thead>
<tr>
<th>Height (m)</th>
<th>Ulna length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men (&lt;65 years)</td>
<td>1.94</td>
</tr>
<tr>
<td>Women (&lt;65 years)</td>
<td>1.84</td>
</tr>
<tr>
<td>Men (≥65 years)</td>
<td>1.87</td>
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<td>Men (≥65 years)</td>
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BMI chart

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<tr>
<th>Weight (lbs)</th>
<th>Height (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 105</td>
<td>Underweight</td>
</tr>
<tr>
<td>110 - 115</td>
<td>Healthy</td>
</tr>
<tr>
<td>120 - 125</td>
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</tr>
<tr>
<td>130 - 135</td>
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<td>Obesity+</td>
</tr>
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<td>Obesity++</td>
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<td>170 - 175</td>
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</tr>
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</table>

- Infection
- Pressure ulcers
- Anaemia
- Hypotension

Malnutrition

- Confusion
- Decreased wound healing
- Impaired cognition
- Increased bone fractures

**Calculating healthy weight/height range**

**Estimating height from ulna length**
Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

<table>
<thead>
<tr>
<th>Height (m)</th>
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<tbody>
<tr>
<td>Men (&lt;65 years)</td>
<td>1.94</td>
</tr>
<tr>
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</tr>
<tr>
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<td>1.65</td>
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<td>Women (≥65 years)</td>
<td>1.61</td>
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**BMI chart**

<table>
<thead>
<tr>
<th>Weight (lbs)</th>
<th>Height (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 105</td>
<td>Underweight</td>
</tr>
<tr>
<td>110 - 115</td>
<td>Healthy</td>
</tr>
<tr>
<td>120 - 125</td>
<td>Overweight</td>
</tr>
<tr>
<td>130 - 135</td>
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<tr>
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<td>Obesity+</td>
</tr>
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Signs of dehydration

- Dry mucous membranes
- Thickened secretions
- Reduced tissue turgor (elasticity)
- Reduced sweating
- Sunken eyes
- Tachycardia
- Low blood pressure and postural hypotension

- Altered consciousness including confusion and irritability
- Increasing functional impairment
- Weakness
- Constipation
- Reduced or concentrated (darker) urine output
- Reduced axillary sweating.

Consequences of dehydration in the elderly

- Infection
- Pressure ulcers
- Weakness and fatigue
- Hypotension
- Decreased attention and concentration
- Increased risk of acute kidney injury
- Impaired cognition
- Increased risk of falls
Dehydration assessment, treatment and prevention

**Indicators for dehydration**
- Colour of urine and decreased urine output
- Assess: mouth/mucous membrane and skin
- Thickened secretions
- Postural hypotension
- Cramps
- Irritability
- Delirium

**First line treatment**
- Input/output – chart for 3 days
- Minimum 1.6 L/day (unless contraindicated)
- Offer fluids of choice 2-hourly
- Non-ambulatory present with fluids every 1.5 hours
- Encourage oral intake each medication round
- Review medication

**Second line treatment**
- Contact GP/NP who may follow up with one of the following investigations:
  - blood urea/creatinine levels
  - electrolytes
- Continue fluids

**Third line treatment**
- Re-contact GP/NP
- SC fluids?
- Reassess in 24 hours

**Prevention**
Explore fluids of choice and offer:
- jelly
- tea or coffee
- ice blocks
- soup.
Dysphagia and safe feeding

Signs and symptoms of swallowing problems
- Coughing and/or choking when eating or drinking
- Drooling/poor management of oral secretions
- Pocketing of food in cheeks
- Facial weakness
- Gurgly, hoarse voice or a lot of throat clearing
- Multiple swallows for each bolus
- Decline in respiratory status
- Prolonged meal times
- Weight loss or malnutrition
- Dehydration
- Recurrent chest infections
- Pain with swallowing
- Increasing avoidance of multiple foods/liquids.

Safe feeding strategies
- Make sure you have everything you need within reach (utensils, condiments, napkins and so on).
- Ensure you are both sitting comfortably upright and the person is alert.
- Reduce distractions and interruptions as much as possible.
- Place the meal tray in front of the person.
- Encourage the person to feed themselves if able. Help the person to feed themselves by guiding their hand - this can reduce risk as gives person more control.
- If you are feeding them, feed from the front so they can see the food coming.
- Offer one small mouthful at a time. Allow rests in between.
- Make sure you see a swallow before you give another spoonful.
- If food is still leftover, prompt another swallow.
- Consider offering the most nutritious part first.
- Make sure you have plenty of time for mealtimes.
- Keep a record of how much has been eaten and any concerns you have.
Eating or drinking should be stopped if any of the following happen

- Drowsiness
- Coughing a lot
- Choking
- Shortness of breath
- Voice sounds wet or gurgly.

Contact a GP/NP if a chesty cough, fever or difficulty breathing develops. A reassessment of swallowing may be required.

Safe feeding strategies

How to refer to speech language therapist

Follow local guidelines when referring.

When referring a person, include the following useful information:

- Description of difficulties
- Current diet and fluids
- Relevant background information, ie, Parkinson’s disease
- Chest status, ie, current aspiration pneumonia
- History of dysphagia, if any
- GP/NP consent.
Food and fluid textures

Food and fluid textures pyramid

[Image of the IDDSI food and fluid textures pyramid]
Mapping to IDDSI – drinks

**Current NDD Liquids**

- **Thin**
- *(Naturally thick liquids, e.g. infant formula, supplements)*
  - **0 Thin**
- **Nectar-thick**
  - 51-350 mPa.s
- **Honey-thick**
  - 351-1750 mPa.s
- **Spoon-thick**
  - >1750 mPa.s
- **1 Slightly Thick**
- **2 Mildly Thick**
- **3 Moderately Thick**
- **4 Extremely Thick**

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Mapping to IDDSI – foods

**Current NDD Food Textures**

- **Regular**
- **Dysphagia Advanced ✔**
- **Dysphagia Mechanically Altered ✔**
- **Dysphagia Pureed ✔**
- **7 Regular**
- **6 Soft & Bite-Sized**
- **5 Minced & Moist**
- **4 Pureed**
- **3 Liquidised**

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National descriptors for texture modification in adults

### Transitional foods
- Food that starts as one texture (eg, firm solid) and changes into another texture specifically when moisture (eg, water or saliva) is applied, or when a change in temperature occurs (eg, heating)

### 7 Regular
- Normal, everyday foods of various textures that are developmentally and age appropriate
- Any method may be used to eat these foods
- Foods may be hard and crunchy or naturally soft
- Sample size is not restricted at Level 7, therefore, foods may be a range of sizes:
  - Smaller or greater than 15 mm = 1.5 cm pieces (adult)
- Includes hard, tough, chewy, fibrous, stringy, dry, crispy, crunchy or crumbly bits
- Includes food that contains pips, seeds, pith inside skin, husks or bones

### 6 Soft and bite-sized
- Can be eaten with a fork, spoon or chopsticks
- Can be mashed or broken down with pressure from fork, spoon or chopsticks
- A knife is not required to cut this food, but may be used to help loading a fork or spoon
- Chewing is required before swallowing
- Soft, tender and moist throughout but with no separate thin liquid
- ‘Bite-sized’ pieces as appropriate for size and oral processing skills
  - Adult, 15 mm = 1.5 cm pieces

### 5 Minced and moist
- Can be eaten with a fork or spoon
- Could be eaten with chopsticks in some cases, if the individual has very good hand control
- Can be scooped and shaped (eg, into a ball shape) on a plate
- Soft and moist with no separate thin liquid
- Small lumps visible within the food
  - Adult, 4 mm lump size
- Lumps are easy to squash with tongue

### 4 Extremely thick/pureed
- Usually eaten with a spoon (a fork is possible)
- Cannot be drunk from a cup
- Cannot be sucked through a straw
- Does not require chewing
- Can be piped, layered or moulded
- Shows some very slow movement under gravity but cannot be poured
- Falls off spoon in a single spoonful when tilted and continues to hold shape on a plate
- No lumps
- Not sticky
- Liquid must not separate from solid
National descriptors for texture modification in adults continued

3 Moderately thick / liquidised

- Can be drunk from a cup
- Some effort is required to suck through a standard bore or wide bore straw (wide bore straw = 0.275 inch or 6.9 mm)
- Cannot be piped, layered or moulded on a plate
- Cannot be eaten with a fork because it drips slowly in dollops through the prongs
- Can be eaten with a spoon
- No oral processing or chewing required – can be swallowed directly
- Smooth texture with no ‘bits’

2 Mildly thick

- Flows off a spoon
- Sippable, pours quickly from a spoon, but slower than thin drinks
- Effort is required to drink this thickness through standard bore straw (standard bore straw = 0.209 inch or 5.3 mm diameter)

1 Slightly thick

- Thicker than water
- Requires a little more effort to drink than thin liquids
- Flows through a straw, syringe, teat/nipple
- Similar to the thickness of commercially available ‘anti-regurgitation’ (AR) infant formula

0 Thin

- Flows like water
- Fast flow
- Can drink through any type of teat/nipple, cup or straw as appropriate for age and skills
Pain assessment and management | Te aromatawai me te whakahaere mamae

Definition

Pain is an individual, multifactorial experience influenced by culture, previous pain events and ability to cope. Pain is what the person says it is.

Pain assessment overview

- ‘Tell me about your pain’
  - Is this pain increasing or ongoing?
  - Does the resident have communication problems, eg, advanced dementia, impaired, non-verbal?
  - Refer Pain assessment in advanced dementia scale (next page)
  - What does the resident think is causing the pain?

- P: Provokes: what makes the pain better/worse?
- Q: Quality: what does it feel like? Is it sharp, dull, stabbing, burning, crushing?
- R: Radiation: does the pain radiate, move anywhere?
- S: Severity: how bad is the pain, how severe is it?
- T: Time: when does it occur, how long does it last?

Numeric pain rating scale chart

<table>
<thead>
<tr>
<th>None</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-3</td>
<td>4-6</td>
<td>7-10</td>
</tr>
</tbody>
</table>

Indications: Adults and children > 9 years old, in all patient care settings, who are able to use numbers to rate the intensity of their pain.
Pain assessment in advanced dementia (PAINAD)

**Instructions:** observe patient for 5 minutes before scoring their behaviour. Score behaviour according to the above chart. The patient can be observed under different conditions, eg, at rest, during a pleasant activity, during caregiving, after administration of pain medication.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathing independent of vocalisation</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Occasional laboured breathing, short period of hyperventilation</td>
</tr>
<tr>
<td></td>
<td>Noisy laboured breathing, long period of hyperventilation, Cheyne Stokes respiration</td>
</tr>
<tr>
<td>Negative vocalisation</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Occasional moan or groan, low level speech with a negative or disapproving quality</td>
</tr>
<tr>
<td></td>
<td>Repeated, troubled calling out, loud moaning or groaning, crying</td>
</tr>
<tr>
<td>Facial expression</td>
<td>Smiling or inexpressive</td>
</tr>
<tr>
<td></td>
<td>Sad, frightened, frowning</td>
</tr>
<tr>
<td></td>
<td>Facial grimacing</td>
</tr>
<tr>
<td>Body language</td>
<td>Relaxed</td>
</tr>
<tr>
<td></td>
<td>Tense, distressed pacing, sighing</td>
</tr>
<tr>
<td></td>
<td>Rigid, fists clenched, knees pulled up, pulling or pushing away, striking out</td>
</tr>
<tr>
<td>Consolable</td>
<td>No need to console</td>
</tr>
<tr>
<td></td>
<td>Distracted or reassured by voice</td>
</tr>
<tr>
<td></td>
<td>Unable to console, distract or reassure</td>
</tr>
</tbody>
</table>

**Total score ranges 0-10 points**

**Possible interpretation is:**

- 1-3 = mild
- 4-6 = moderate
- 7-10 = severe pain

- **Emotional:** anger, anxiety, sadness, loss, fear, loss of body image
- **Spiritual:** meaning of life, culture, religion/beliefs, helplessness
- **Social:** relationships, roles, cultural, attitude
- **Physical:** illness, side effects, eg, medication, fatigue, lack of sleep.

**Remember**

- People may have more than one pain over multiple sites.
- People use different words to describe pain.
- Identify and treat reversible causes of pain, eg, UTI, constipation, trauma.
- Listen to caregivers and family/whānau.
- Document in progress notes.
- Make and then follow an individual care plan after discussion with resident/family/whānau.
- Reassess regularly.
- Discuss with GP/NP, particularly if pain is not being managed.
- Be guided by function.
Successful pain management

- Is resident- and family-centred and realistic
- Is built on accurate pain assessment
- Uses a holistic approach
- Maintains function.

Pharmacological approaches

- ‘Right drug for pain type’
- Review previous pain management
- Start low and go slow
- Review effect
- Consider and treat side effects, eg, constipation, nausea, vomiting.

Non-pharmacological approaches

- Supportive talks
- Gentle touch
- Distraction
- Repositioning
- Appropriate activities
- Rest
- Music
- Pressure relief
- Prayer and spiritual support
- Listening
- Reminiscing
- Heat/cold
- Encourage and enable family/whānau and cultural involvement and support
- Complementary therapies, eg, massage, aromatherapy, relaxation or rongoa
- Listen to concerns and provide reassurance to resident/family/whānau if they feel angry or frustrated because of the pain.
Pain management regime

Is the pain well managed?

Y

Regular RN and GP/NP review

N

Review and reassess. Consider referral to specialist, eg, hospice, pain clinic, geriatrician

Document effectiveness of pain management regime

Reassess

Appropriate drug to pain guide

<table>
<thead>
<tr>
<th>Right drug for right pain</th>
<th>Somatic</th>
<th>Nociceptive</th>
<th>Visceral</th>
<th>Neuropathic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Consider risk factors of treatment, eg, advanced age, renal and hepatic clearance, cardiovascular disease, gastro-oesophageal disease, glucocorticoid use</td>
<td>Establish diagnosis where possible – some specific causes have preferred therapy, eg, carbamazepine for trigeminal neuralgia</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Superficial: skin, mucous, Deep: bone, organ capsules Lymph nodes</td>
<td>Organs, deep tumour masses, deep lymph nodes</td>
<td>Shingles, painful peripheral neuropathy, phantom pain, sciatica</td>
<td></td>
</tr>
<tr>
<td><strong>Descriptors</strong></td>
<td>Ache, throbbing, dull</td>
<td>Dull deep cramping, colicky, pressure</td>
<td>Pins and needles, burning, shooting</td>
<td></td>
</tr>
<tr>
<td><strong>Pain medication stepped approach</strong></td>
<td>Try non-pharmacological approach first</td>
<td>Topical agents, eg, capsaicin, diclofenac gel</td>
<td>Topical agents, eg, capsaicin, diclofenac gel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topical agent, eg, capsaicin, diclofenac gel</td>
<td>Regular paracetamol</td>
<td>Regular paracetamol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regular paracetamol, no more than 1 g QID: consider risk for hepatotoxicity</td>
<td>Tricyclic antidepressants, eg, amitriptyline or nortriptyline (multiple and cholinergic side effects, eg, dry mouth, orthostatic hypotension, constipation, urinary retention, sedation)</td>
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<tr>
<td></td>
<td>Depression can worsen pain perception – consider antidepressant</td>
<td>Gabapentin, pregabalin</td>
<td>Gabapentin, pregabalin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carbamazepine for patients with trigeminal neuralgia</td>
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Pain medication to avoid in older people

- Non-steroidal anti-inflammatories – avoid for those with heart failure, GI disease, asthma or renal impairment
- Opioids are not recommended for chronic pain, only short term for acute pain (there is no evidence to support long-term use of opioids)
- Codeine – metabolises to morphine and very constipating
- Tramadol – increased risk of delirium
Respiratory care guide | Te aratohu maimoa hā

Shortness of breath (SOB; also known as dyspnea) assessment tool

Assess and record the following:
- Set of readings: temperature, respiration rate, heart rate, blood pressure
- Oxygen sats – pulse oximeter (if available)
- Is there a diagnosis of COPD, CHF or diabetes? Refer to lung sound basics on next page
- Cough – productive or non-productive, difficult to expectorate?
- Sputum – amount and colour? Yellow, green, red pus
- Lung sounds: crackles, rhonchi (wheeze heard with stethoscope), record where it is heard on the chest
- Note change in mental status – delirium? (See 4AT assessment) Physical and functional status changes (consider ADL assessment)
- Pain on breathing – chest/cardiac pain
- Little or no relief from short-acting bronchodilators

Treatment is needed if one of the following signs or symptoms is present:
- New and worsening cough
- Increased or newly purulent sputum, unable to expectorate?
- Dyspnea (difficulty in breathing)/SOB, orthopnoea
- Altered mental state (confusion)
- Sputum – amount and colour?
- Yellow, green, red pus
- New crackles or wheezes heard on chest exam
- Comorbidities, such as cardiac failure, renal or hepatic impairment
- Increased or newly purulent sputum, unable to expectorate?
- Bacterial infection
- Sputum culture
- Sputum Gram stain
- Is this a worsening of an existing respiratory condition?

Yes
- Is there an individualised care plan?
  - Yes
  - Implement care plan
  - No
  - Review with GP/NP/nurse leader and establish or revise individualised care plan
- No
- Contact GP/NP with acute decline and new onset of symptoms
  - Review advance treatment plan and hospitalisation

Monitor observations and review as appropriate

Not for hospitalisation?
- Initiate palliative care nursing/supportive measures for SOB and/or anxiety

If hospital admission is recommended, do the following:
- Copy advanced directives and care plans
- Discuss with family/whānau/EPOA
- Copy medication, medical history, recent nursing and medical assessment and recent labs
Preventative care

- See immunisation guidelines below.
- Review advance treatment plan.
- Consider smoking cessation, healthy diet, physiotherapy referrals, pulmonary rehabilitation, regular exercise as tolerated.

Recommended immunisation guidelines

- All residents should be vaccinated against influenza by March of each year.
- Residents admitted between March and June should be vaccinated, if not already immunised for the current influenza season.
- Those with heart or lung disease may want to consider streptococcus vaccination. Not subsidised and requires private payment.

Palliative care respiratory guidelines

- Psychosocial support – provide reassurance and a calm presence for the resident and family/whānau. This helps reduce anxiety, which reduces dyspnoea.
- Breathing control and learned coping strategies:
  - Comprehensive assessment of resident’s strategies, to proactively help breathlessness
  - Individual resident care plans are important.
- Decrease the resident’s need for exertion during exacerbations.
- Sit resident up and support by pillows.
- Have a cool fan blow on the resident’s face.
- Physiotherapy for pulmonary rehabilitation.
- Oral lorazepam or midazolam (SC), or low doses of morphine, can help dyspnoea, but there is no evidence to support the use of nebulised opioids.
- Oxygen must be prescribed and used under the direct supervision of a prescribing health practitioner.
- Oral care – mouth breather.

Lung sound basics

- Crackles: (Rales) are fine rattling sounds. These are non-continuous, high-pitched, fine crackles, like the sound of carbonated beverages. These sounds are usually caused by the presence of fluid in the alveoli and bronchioles.
- Wheezes: Wheezes are musical sounds like the high-pitched notes on a clarinet. Wheezes are produced by constricted or partially obstructed airways.
COPD guidelines

<table>
<thead>
<tr>
<th>Typical symptoms</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few symptoms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathless on moderate exertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recurrent chest infections</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little or no effect on daily activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathless on walking on level ground</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing limitations of daily living</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cough and sputum production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exacerbations requiring oral corticosteroids and/or antibiotics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathless on minimal exertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily activities severely curtailed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiencing regular sputum production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic cough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exacerbations of increasing frequency and severity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lung function

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEV1 60–80% predicted</td>
<td>FEV1 40–59% predicted</td>
<td>FEV1 &lt; 40% predicted</td>
</tr>
</tbody>
</table>

COPD non-pharmaceutical interventions

- Risk reduction – check smoking status, support smoking cessation, recommend annual flu vaccine and pneumococcal vaccine according to Immunisation booklet.
- Optimise function – encourage regular exercise and physical activity, review nutrition, provide education, develop GP/NP management plan and written COPD action plan and initiate regular reviews.
- Consider comorbidities – especially cardiovascular disease, anxiety, depression, lung cancer and osteoporosis.
- Refer to pulmonary rehabilitation for symptomatic patients.
- Consider oxygen therapy, surgery, bronchoscopic intervention, palliative care services and advanced care planning.

COPD pharmaceutical interventions

- Start with short-acting relievers (inhaled medicines) – use as needed.
- Short-acting Beta2 agonist (SABA) or short-acting muscarinic antagonist (SAMA).
- Add long-acting bronchodilators, eg, long-acting muscarinic antagonist (LAMA) or long-acting Beta2 agonist (LABA). Review need for LAMA/LABA as a fixed-dose combination inhaler.
- Consider adding an anti-inflammatory agent: ICS/LABA and LAMA.
- Check device usage technique and adherence at each visit.

**Please be aware:** Hearing lung sounds is difficult in the frail aged due to reduced lung capacity. Check inhaler technique, consider spacer and so on.
Skin wounds | Ngā taotū kiri

Treatment should be holistic, realistic and patient-centred

Consider

• Pain
• Psychological support, eg, anxiety, depression, self-neglect
• Body image
• Independence, eg, work, financial
• Malodour and exudate
• Quality of life
• Carer stress, family/whānau
• Nutrition and hydration.

Realistic goals of care

• Normal healing – healing proceeds as would be expected
• Hard to heal wounds – healing is prolonged, despite appropriate wound care, eg, leg ulcer, diabetic ulcers
• Palliative wounds – no healing potential
• Discuss realistic goals with resident and family
• Symptom management, rather than healing, may be the only possible outcome.

Wound bed preparation – T I M E evaluation

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<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tissue, removal of non-viable tissue</td>
<td>Infection, inflammation (bio-burden, biofilm)</td>
<td>Moisture balance</td>
<td>Edge of wound advancement</td>
</tr>
<tr>
<td></td>
<td>Hydrogels, alginate, hydro fibres, cadexomer iodine, honey</td>
<td>Action: remove or reduce bacterial load – silver, honey, cadexomer iodine, wound solutions, polyhexamethylene biguanide (PHMB), oxidised solution</td>
<td>Action: restore moisture balance: hydrogels, hydrocolloids, foams, hydro fibres, absorbent pads</td>
<td>Action: measure wound progression, photograph, measure, including undermining</td>
</tr>
</tbody>
</table>
Arterial and neuropathic ulcers
- Doppler assessment
- Consult with physician. Consider vascular or podiatry assessment
- Pain management
- Ischemic wounds, keep dry and protected
- Reduce bio-burden
- Raise head of bed slightly
- Remove constricting garments and keep feet warm
- Check feet and footwear. Consider orthotics or other appropriate footwear
- Encourage exercise as comfortably tolerated.

Venous ulcers
- Doppler assessment
- Compression therapy gold standard treatment
- Elevation
- Encourage exercise as comfortably tolerated
- Moisture balance
- Skin maintenance – ulcers may be showered
- Prevention of reoccurrence. Consider compression hosiery.

Skin tears
- Realign skin flap, where possible, without overly stretching the skin
- Consider non-adherent dressings that optimise TIME principle
- Durable dressings that do not cause trauma on removal
- Consider protection and care of fragile skin, eg, skin protectors, regular gentle moisturising, pH-appropriate skin cleansers
- Assess environment, eg, remove excess clutter, pad sharp edges, manage nail care.

Carcinogenic lesions
- Consult with physician. Consider biopsy
- Realistic patient-centred goals
- Odour management, eg, charcoal dressing, oxidising solutions or cat litter under the bed
- Quality of life.
Incontinence-associated dermatitis

- Manage incontinence
- Implement a skin care regime
- Cleanse – pH-appropriate skin cleanser
- Protect – barrier
- Restore moisture.

Pressure injuries

- See pressure injury guide.

Wound prevention protocols

- Wound risk-screening tool; Waterlow, Braden or similar; reassess if there is a change in condition.
- Consider medication and other disease processes in care planning.
- Careful removal of skin adhesives.
- Consider alternatives such as silicone or safe tech dressings or non-adherent dressings.
- Skin protection, moisture management, hydration and nutrition, pressure off-loading, refer to the table on page 111 for bundles of care for pressure injury prevention.
- Highest level of mobility as possible.
- Do not use waterproof/incontinence sheets on mattresses.
- Utilise a 30 degree tilt position.
- Flex knees to reduce shear of the sacrum.
- Use pillows or foam wedges to keep bony prominences apart from direct contact with each other, eg, knees and ankles.
- Use sliding sheets to reduce friction and shear.
- Multidisciplinary team – OT/PT positioning and postural assessment, seated and lying.
Care plan – pressure injury prevention

Skin assessment – head to toe

- Look, listen, feel
  - Erythema
  - Blanching response
  - Localised heat
  - Oedema
  - Induration
  - Skin breakdown, bony prominences
  - Skin breakdown under medical devices
  - Pain
- Be on the lookout.

Age-related skin changes

- Reduced pigmentation
- Reduced skin elasticity
- Reduced vascular blood
- Reduced skeletal muscle
- Reduced cellular shedding and replacement
- Thinner dermis
- Reduced sebum.

See also: SSKIN care bundle (Accident Compensation Corporation 2017).
How to classify and document pressure injuries

The NPUAP pressure injury (PI) classification system provides a consistent and accurate means by which the severity of a pressure injury can be communicated and documented.

**PI identification and classification**

**Stage I PI, non-blanchable erythema**

Intact skin with non-blanchable redness of a localised area usually over a bony prominence

- Darkly pigmented skin may not have viable blanching. Its colour may differ from the surrounding area
- The area may be painful, firm, soft, warmer or cooler, compared with adjacent tissue
- May be difficult to detect in individuals with dark skin tones
- May indicate ‘at-risk’ persons (a heralding sign of risk)

**Stage II PI, partial thickness skin loss**

Partial thickness loss of dermis presenting as a shallow, open wound with a red/pink wound bed without slough

- May present as an intact or open/filled serum-filled blister
- Presents as a shiny or dry shallow ulcer without slough or bruising. **Note:** bruising indicates suspected deep tissue injury
- Stage II PI should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation

**Stage III PI, full thickness skin loss**

Full-thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed

- Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunnelling
- The depth of a stage III PI varies with anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and stage III PIs can be shallow; in contrast, areas of significant adiposity can develop extremely deep stage III PIs. Bone or tendon is not viable or directly palpable
Pressure injury identification and classification continued

<table>
<thead>
<tr>
<th>Stage IV pressure injury: full-thickness tissue loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed.</td>
</tr>
<tr>
<td>• The depth of a stage IV PI varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue, and these PIs can be shallow.</td>
</tr>
<tr>
<td>• Stage IV PIs can be extended into muscle and/or supporting structures, e.g., fascia, tendon or joint capsule, making osteomyelitis possible. Exposed bone or tendon is visibly or directly palpable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unstageable pressure injury: depth unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-thickness tissue loss of which the bone of the PI is covered by slough (yellow, tan, grey, green or brown) and or eschar (tan, brown or black) in the PI bed</td>
</tr>
<tr>
<td>• Until enough slough or eschar is removed to expose the true depth, and therefore the stage, cannot be determined. Stable (dry, adherent without erythema or fluctuance) eschar on the heels serves as the body’s natural biological cover and should not be removed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suspected deep tissue injury: depth unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple or maroon localised area or discoloured, intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear</td>
</tr>
<tr>
<td>• The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler, compared with adjacent tissue.</td>
</tr>
<tr>
<td>• Deep tissue injury may be difficult to detect in individuals with dark skin tone.</td>
</tr>
<tr>
<td>• Evolution may include a thin blister over a dark wound bed. The PI may further involve and become covered by thin eschar. Evolution may be rapid, exposing other layers of tissue even with optimal treatment.</td>
</tr>
</tbody>
</table>
### Level of risk to recommended care checklist

<table>
<thead>
<tr>
<th>Not at risk</th>
<th>At risk 10+</th>
<th>High risk 15+</th>
<th>Very high risk 20+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bundle A</strong></td>
<td><strong>Bundle B</strong></td>
<td><strong>Bundle C</strong></td>
<td><strong>Bundle D</strong></td>
</tr>
</tbody>
</table>

**Initial assessment on admission within 8 hours of admission to ward**

- [ ] Complete Waterlow risk assessment
- [ ] Full visual check of skin
- [ ] Record PIs, if present, upon admission
- [ ] Complete Waterlow risk assessment
- [ ] Full visual check of skin
- [ ] Provide patient with information leaflet and discuss
- [ ] Complete Waterlow risk assessment
- [ ] Full visual check of skin
- [ ] Provide patient with information leaflet and discuss
- [ ] Complete Waterlow risk assessment
- [ ] Full visual check of skin
- [ ] Provide patient with information leaflet and discuss

**Inspect skin**

- **Weekly**
  - Check for broken areas, redness, localised heat, oedema, induration, tissue consistency and pain
  - Document outcome
- **Once a day during AM shift**
  - Check for broken areas, redness, localised heat, oedema, induration, tissue consistency and pain
  - Document outcome
- **Twice a day AM/PM shift**
  - Check for broken areas, redness, localised heat, oedema, induration, tissue consistency and pain
  - Document outcome
- **Once each nursing shift**
  - Check for broken areas, redness, localised heat, oedema, induration, tissue consistency and pain
  - Document outcome

**Manage moisture**

- [ ] Ensure skin remains free of excessive moisture
- [ ] Moisturise skin daily
- [ ] Manage incontinence
- [ ] Moisturise skin daily
- [ ] Manage incontinence
- [ ] Use barrier cream, if required
- [ ] Follow toileting plan
- [ ] Moisturise skin daily
- [ ] Manage incontinence
- [ ] Use barrier cream, if required
- [ ] Follow toileting plan

**Adequate hydration and nutrition**

- [ ] Record patient’s weight weekly
- [ ] Consider dietitian referral
- [ ] Ensure good fluid and nutritional intake
- [ ] Record weight weekly
- [ ] Make dietitian referral
- [ ] Ensure good fluid and nutritional intake
- [ ] Record fluid and food intake
- [ ] Record weight weekly
- [ ] Ensure patient changes position every 2 hours
- [ ] Ensure patient changes position every 2 hours when sitting in a chair
- [ ] Ensure heels are free off the surface of the bed or
- [ ] Use heel protectors
- [ ] Ensure patient changes their position every 2 hours when sitting in a chair
- [ ] Ensure heels are free off the surface of the bed or
- [ ] Use heel protectors
- [ ] Do not turn patients onto red areas or broken skin

**Minimise pressure**

- [ ] Bed at least
  - 2-hourly change of position
  - 3-hourly when on a pressure mattress
- [ ] Sitting at least
  - 2-hourly change on chair
- [ ] Bed at least
  - 2-hourly change of position
  - 3-hourly when on a pressure mattress
- [ ] Sitting at least
  - 2-hourly change on chair
- [ ] Ensure patient changes position every 2 hours
- [ ] Ensure patient changes position every 2 hours when sitting in a chair
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  - 3-hourly when on a pressure mattress
- [ ] Sitting at least
  - 2-hourly change on chair
- [ ] Bed at least
  - 2-hourly change of position
  - 3-hourly when on a pressure mattress
- [ ] Sitting at least
  - 2-hourly change on chair
Sexuality and intimacy is a normal part of life for all adults

Enjoyment of physical intimacy and sexuality does not cease just because someone is older or lives in residential aged care.

It is a basic human right to be able to express sexuality.

It is important to view sexuality in terms of these rights that include:

- the right to be treated with respect
- the right to be free from discrimination and exploitation
- the right for dignity and independence
- the right to give informed consent.

However, sexual expression by aged care residents can be uncomfortable for staff, other residents and families/whānau. It is important for facilities to have a sexuality policy. This should include:

- an antidiscrimination policy
- policies and procedures to ensure privacy and the resident’s dignity
- policies and procedures to ensure expression of sexuality in a safe and tolerant environment.

It may be difficult for staff to balance resident’s needs for privacy against their need for personal care. Staff should also respect the confidentiality of relationships between residents. Staff do not have to disclose information to relatives and other parties.

- Sexually transmitted diseases are possible at any age.
- Develop a confidential care plan around the resident’s sexuality needs.

Consenting to sexual relations

People with dementia in care homes may form new sexual relationships with other care home residents. As long as both parties agree and have capacity to consent to these relationships, then care home staff should respect such relationships.

How to determine the capacity and risk to the individual:

- To what extent are the residents involved capable of making their own decisions?
- Does the resident with dementia have the ability to recognise the person with whom they are having the relationship? Could they have mistaken the person for their original partner?
- Is the resident with dementia capable of expressing their views and wishes within the relationship through either verbal or nonverbal communication?
• Can the residents involved understand what it means to be physically intimate?
• What is the resident’s ability to avoid exploitation?
• What is the resident’s ability to understand future risk?
• How may the resident be affected if they are ignored, rejected after intimacy or the relationship ends?

Based on the work of Lichtenberg (1997) and Lichtenberg and Strzepek (1990).

**Sexually disinhibited behaviour**

There may be some people with certain types of cognitive impairment to exhibit disinhibited sexual behaviour. It is important to do an assessment of the situation and determine the following:

- What form does the behaviour take?
- What is the context for the behaviour?
- How frequent is it?
- What factors contribute to it?
- Is it a problem and for whom?
- What are the risks involved and for whom?
- Are the participants competent?
## Sexual behaviour – levels of concern

<table>
<thead>
<tr>
<th>Description of sexual behaviour</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concern level 1</strong>&lt;br&gt;Intimacy/courtship:</td>
<td>No concern associated with this behaviour if both persons are consenting&lt;br&gt;Overall goal of staff response is to provide socially appropriate context for relationship that offers comfort and reassurance:</td>
</tr>
<tr>
<td>• Kissing, hugging, handholding, fondling, cuddling (not inclusive)</td>
<td>• This behaviour is viewed primarily as companionship, an intimacy relationship between two adults who are mutually consenting, implied by interactions with no evidence of distress.</td>
</tr>
<tr>
<td>• Consensual (implies awareness of actions)</td>
<td>• Source of urgency associated with this behaviour is usually staff and/or family/whānau discomfort. Staff may wish to protect the family/whānau.</td>
</tr>
<tr>
<td>• The couple should have intimacy needs recognised and privacy respected.</td>
<td></td>
</tr>
<tr>
<td><strong>Concern level 2</strong>&lt;br&gt;Verbal sexual talk:</td>
<td>Low level of concern associated with this behaviour&lt;br&gt;• This behaviour may cause discomfort and reaction when directed towards staff, often occurring during personal care.</td>
</tr>
<tr>
<td>• Flirting, suggestive language, sexually laden language</td>
<td>• Staff should respond respectfully.</td>
</tr>
<tr>
<td>• Non-aggressive or threatening</td>
<td>• If suggestive language directed at co-resident, visitor or staff, the behaviour should be redirected into a more socially appropriate context.</td>
</tr>
<tr>
<td></td>
<td>• Punitive language cannot be tolerated. An example of an appropriate response: ‘John, would you like to have a chat? Why don’t you tell me about your wife/partner…’</td>
</tr>
<tr>
<td><strong>Concern level 3</strong>&lt;br&gt;Self-directed sexual behaviours:</td>
<td>Low level of concern&lt;br&gt;For self-stimulating behaviours, the staff need to observe and answer the following questions:</td>
</tr>
<tr>
<td>• Masturbating in public</td>
<td>• Is this responsive behaviour an attempt to communicate, eg, a full bladder, discomfort, infection?</td>
</tr>
<tr>
<td>• Exposing oneself</td>
<td>• Does the person engage in this behaviour in the presence of others? The act is not inappropriate rather the environment may be socially inappropriate when needs for privacy are not met.</td>
</tr>
<tr>
<td></td>
<td>• Focus on maintaining privacy, dignity, safety and least amount of restriction as possible.</td>
</tr>
<tr>
<td></td>
<td>• Staff education may be necessary to remind caregivers to provide care without judgement, teasing or ridicule.</td>
</tr>
<tr>
<td><strong>Concern level 4</strong>&lt;br&gt;Physical sexual behaviours:&lt;br&gt;Directed towards co-residents with agreement&lt;br&gt;Directed to resident by companion/spouse/partner with agreement&lt;br&gt;Risk immediately increases when sexual expression involves a partner</td>
<td>Moderate level of concern with this behaviour&lt;br&gt;In early dementia, the capacity to make decisions regarding basic needs and immediate gratification, such as sexual activity, is retained.</td>
</tr>
<tr>
<td></td>
<td>• Staff must be vigilant about observing the resident(s) for any signs of sexual overtures that are unwelcome: objective knowledge of the extent of sexual expression; one-on-one contact with the intent to kiss and caress, disrobing, oral sex or attempt to engage in penetrative intercourse.</td>
</tr>
<tr>
<td></td>
<td>• Does resident present as distressed, upset, worried, anxious or exhibit any behaviour eliciting concern?</td>
</tr>
<tr>
<td></td>
<td>• Can the residents give an account of behaviours they would find acceptable/unacceptable?</td>
</tr>
<tr>
<td></td>
<td>• Do they have the ability to say ‘no’ or indicate refusal and/or acceptance?</td>
</tr>
<tr>
<td></td>
<td>• Do they have the ability to avoid exploitation?</td>
</tr>
<tr>
<td></td>
<td>• If the resident is distressed or non-consenting, move to level 5.</td>
</tr>
<tr>
<td></td>
<td>• If the resident(s) is incapable of making decisions regarding their sexual expression, it is critical to have EPOA involvement to establish resident’s previous wishes, values and beliefs, and to work with the team about decisions that act in the best interest of the resident.</td>
</tr>
<tr>
<td></td>
<td>• The focus of interventions should be on creative solutions that allow the consenting couple privacy and dignity plus opportunities to engage in social activities with others in a socially appropriate context.</td>
</tr>
</tbody>
</table>
Sexual behaviour – levels of concern continued

<table>
<thead>
<tr>
<th>Description of sexual behaviour</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concern level 5</strong></td>
<td></td>
</tr>
<tr>
<td>• Non-consensual, overt physical sexual behaviours directed towards others that are a source of distress</td>
<td>A high level of concern is associated with this series of behaviours</td>
</tr>
<tr>
<td>• A resident may enter another’s personal space and clearly touch them in a way that is unwelcome and upsetting for the person. This could range from sexual touching to penetrative sexual intercourse.</td>
<td></td>
</tr>
<tr>
<td>• The response indicates the person is objecting and the staff view it as an unwanted invasion of personal space.</td>
<td></td>
</tr>
<tr>
<td>• The appropriate staff response is to protect the resident/others from unwelcome sexual behaviour. The resident who is expressing overt sexual behaviour should be treated with respect and dignity and should not be ostracised.</td>
<td></td>
</tr>
<tr>
<td>• What is the awareness of the known sexual behaviours: one-on-one contact with the intent to kiss and caress, disrobing, oral sex, or an attempt to engage in penetrative intercourse?</td>
<td></td>
</tr>
<tr>
<td>• Is there any known history of sexually transmitted infections?</td>
<td></td>
</tr>
<tr>
<td>• Aggressive or repeated sexual overtures that are unwanted and rejected by others in the environment</td>
<td>For this type of sexual behaviour, there must be:</td>
</tr>
<tr>
<td>• holistic assessment of possible causes or triggers to the behaviour and any evidence of injury</td>
<td></td>
</tr>
<tr>
<td>• referral to the geriatric mental health outreach team</td>
<td></td>
</tr>
<tr>
<td>• awareness of actions: an assessment of resident(s)</td>
<td></td>
</tr>
<tr>
<td>• NP/GP clinical assessment of the person, if there has been any type of assault.</td>
<td></td>
</tr>
</tbody>
</table>

Discuss and document

- Discussion with the resident and/or the spouse/partner
- If EPOA is decision-maker, ask about person’s values, beliefs, life story
- All staff to be aware of interventions for sexual expression for each resident involved, with inclusion in care plan
- Documentation to include the sexual behaviour assessment
Caring for sexual- and gender-diverse people

- Lesbian
- Gay
- Bisexual
- Trans-gender
- Queer
- Intersex

Caring for sexual- and gender-diverse people

- All staff should avoid making any assumptions about gender identity and sexual orientation, just as they should avoid assuming racial identity, age and other characteristics.
- Providers should always work from the premise that they have LGBTQI+ people in their service, even if no one has openly identified as LGBTQI+.
- Create an opening for LGBTQI+ clients to talk about family members of choice by asking them open-ended questions, such as ‘Who do you consider family?’ or ‘Who in your life is especially important?’
- Do not assume you can identify LGBTQI+ individuals by appearances, experiences or external characteristics.
- Ask about sexual orientations and gender identities in a safe and confidential manner.
- Do not use any disrespectful language or express surprise at someone’s orientation or sexual identity.
- Do not gossip with others about a patient’s orientation, appearance or behaviour.
- Use the terms that people use to describe themselves and their partners, eg, if someone calls himself ‘gay’ do not use the term ‘homosexual’. If a woman refers to her ‘wife’ then say ‘your wife’ when referring to her; do not say ‘your friend’.
- While taking a history, do not use words that assume people have an opposite-sex partner or spouse, eg, instead of ‘do you have a boyfriend or husband?’ ask ‘do you have a partner?’
- Review documentation: does it include a way to identify partners other than ‘husband and wife?’
- Be aware that there are a wide range of sexual and gender identities and expressions and these can change over time, eg, some people ‘come out’ late in life after having been in a long-term heterosexual marriage.
Caring for transgender older people

- All providers have a duty to deliver services that are respectful of our transgender community.
- Review service documentation; it needs a way to allow a person to enter their preferred name, gender identity and pronouns. This allows all staff to see the patient’s preferences and to use them consistently.
- Use the patient’s correct pronouns (he/him, she/her, they/them, etc) and preferred name. If you are not sure how the person wishes to be addressed, politely ask.
- Be aware of local support services, groups, resources and relevant referral pathways for transgender people.
- Do not confuse being transgender with sexual orientation. Transgender people can be heterosexual, lesbian, gay, bisexual, asexual, takatapui, queer, etc.
- Recognise gender as fluid, or as a spectrum; not all transgender people want to ‘achieve’ or ‘pass’ as the opposite gender to what they were assigned at birth. Many people are comfortable in a space between masculine and feminine, and this is not a reason to withhold gender-affirming treatments.
- If you are unsure how the person would like to be cared for, politely ask rather than assuming.

Syncope and collapse | Te wheroku me te tanuku

Assessment process

**Resident found collapsed**

- Keep resident lying flat or head up until stable
- Check: airway, breathing, circulation

**Is the resident conscious?**

**Y**
- Do assessment

**NFR**
- Assess, call GP/NP and follow advanced care plan
- If no obvious major injury, place in recovery position until able to be moved safely
- Call GP/NP and/or ambulance; administer oxygen, if deemed appropriate

**FULL CPR**
- Start CPR; call an ambulance
Possible causes of collapse

- Tachycardia, bradycardia, arrhythmia, heart defects, heart failure, heart attacks
- Vasovagal (common faint)
- Orthostatic hypotension
- Dehydration
- Hypo/hyperglycaemia
- Stroke/TIA
- Epilepsy
- Anaemia
- Infection
- Medication/alcohol
- Panic/anxiety attack
- Heat stroke
- COPD, emphysema, SOB, excessive coughing
- Inner ear problem.
Assess, act FAST

Assessment

History/witness account
- Events plus circumstances prior to episode
- Symptoms prior to or at onset
- Level of consciousness (LOC)
  - seizure-like activity?
  - transient – related to activity?
  - prolonged decreased LOC?
- Post-episode – pain, confusion
- Responses to stimuli
- Orientation to time, place

Check clinical history and do physical exam

Vitals: temp; BP lying (sitting and standing when stable); O₂ sats; HR (rate and rhythm); BSL

Treat and manage injuries

Medical assessment
- ECG/telemetry
- Lab review
- Medication review

Is it a STROKE?
Act FAST. Call GP/NP and/or ambulance

F
FACE SMILE
(Is one side droopy?)

A
ARMS
RAISE BOTH ARMS
(Is one side weak?)

S
SPEECH
SPEAK A SIMPLE SENTENCE
(Sturred, unable?)

T
TIME
Lost time could be lost brain.
Get to hospital FAST
Urinary incontinence | Te mimi wewete

Changes with age

The maximum amount of urine that the bladder can hold tends to decline. The ability to postpone urination after feeling the need to may decrease.

The amount of residual urine increases:
- In women, the urethra shortens and its lining becomes thinner as the level of oestrogen declines during menopause, decreasing the ability of the urinary sphincter to close tightly.
- In men, the rate of urine flow out of the bladder and through the urethra slows when the prostate gland enlarges and is common when men age.

Review history of urinary incontinence

- Medical diagnosis
- Medication
- Characteristics of voiding – frequency, timing, volume
- Previous treatment for urinary incontinence and outcome
- Importance to resident
- Bowel habits
- Use of restraint
- Use of continence products.

General assessment

- Mental status and motivation
- Mobility
- Environment.

Targeted physical examination

- Lower extremity oedema
- Neurological
- Abdominal
- Pelvic (women) external examination of labia, vagina for prolapse, atrophic vaginitis, skin changes.

Tests

- Urinalysis, urine culture and sensitivity is symptomatic
- Post-void residual urine
- Stress cough test
- Supplemental blood work where indicated.
General considerations

- Avoid caffeine – can irritate the bladder
- Maintain fluid intake – concentrated urine can irritate the bladder
- Time administration of diuretics so the resident can be close to the toilet
- Alcohol may make symptoms worse.

Potentially reversible conditions

- Stool impaction
- Urinary tract infection
- Delirium
- Depression
- Increased fluid intake
- Volume overload
- Congestive heart failure
- Venous insufficiency with oedema
- Drug side effects: rapid acting diuretics, anticholinergics, narcotics, calcium channel blockers, alpha-adrenergic agonists, psychotropic drugs
- Irritation or inflammation in or around lower urinary tract
- Atrophic vaginitis or urethritis
- Metabolic (hyperglycaemia, hypocalcaemia)
- Impaired ability or willingness to reach a toilet
- Illness, injury or restraint that interferes with mobility.

Indications for referral – always refer for these

- Microscopic haematuria
- Visible haematuria
- Recurrent or persistent urinary tract infection associated with haematuria
- Suspected pelvic mass arising from the urinary tract infection
- Symptomatic prolapse visible at or below the vaginal introitus
- Palpable bladder after voiding
- Persisting bladder or urethral pain
- Clinically benign pelvic masses
- Associated faecal incontinence – diarrhoea
- Suspected neurological disease
- Voiding difficulty
- Suspected urogenital fistulae.
Determine urinary incontinence

- **Resident incontinent?**
  - New or worsened
    - Assess for treatable/reversible cause outlined on page 124
    - Definite indication for referral?
      - Discuss referral with interdisciplinary team
      - Still incontinent?
        - Y: Still incontinent?
        - N: Update care plan with appropriate interventions
    - N: Refer care plan and continue/implement relevant interventions

---

PAGE 123 OF 143
**Urinary incontinence symptoms and outcomes**

<table>
<thead>
<tr>
<th>Stress</th>
<th>Involuntary loss of urine that occurs with increased abdominal pressure, eg, coughing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May occur as a result of weakened pelvic floor muscles or malfunction of the urethral sphincter</td>
</tr>
<tr>
<td></td>
<td>Stress and urge incontinence often occur together in women. Known as ‘mixed incontinence’</td>
</tr>
<tr>
<td></td>
<td>Pelvic floor muscle exercises (3 months)</td>
</tr>
<tr>
<td></td>
<td>Scheduled toileting</td>
</tr>
<tr>
<td></td>
<td>Oestrogen cream</td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
</tr>
<tr>
<td></td>
<td>Bladder training to increase capacity (6 weeks)</td>
</tr>
<tr>
<td></td>
<td>Scheduled toileting</td>
</tr>
<tr>
<td></td>
<td>Pelvic floor muscle exercises</td>
</tr>
<tr>
<td></td>
<td>Anticholinergic medicines, eg, oxybutynin to reduce bladder urge to empty urine</td>
</tr>
<tr>
<td></td>
<td>Bladder retraining to increase capacity, anticholinergic medicines, eg, oxybutynin</td>
</tr>
<tr>
<td>Overactive bladder syndrome (OABS)</td>
<td>Where no cause can be found for repeated and uncontrolled bladder contractions, eg, not due to urine infection or enlarged prostate</td>
</tr>
<tr>
<td></td>
<td>OABS is sometimes called irritable bladder or ‘Detrusor (bladder muscle) instability’</td>
</tr>
<tr>
<td></td>
<td>Symptoms include urgency, frequency, nocturia and urge incontinence</td>
</tr>
<tr>
<td>Overflow</td>
<td>Resident never feels urge to urinate, the bladder never empties and small amounts of urine leak continuously</td>
</tr>
<tr>
<td></td>
<td>Prevalent with enlarged prostate</td>
</tr>
<tr>
<td></td>
<td>Rarely seen in women</td>
</tr>
<tr>
<td></td>
<td>May be caused by weak bladder muscles, loss of bladder sensation or obstruction, eg, enlarged prostate, constipation, urethral stricture</td>
</tr>
<tr>
<td></td>
<td>Signs and symptoms include: no or rare urge to void, inability to void, continuous urine dribbling</td>
</tr>
<tr>
<td></td>
<td>Clinical findings: high residual volume of urine in bladder despite incontinence (measured with bladder scan or in/out catheter)</td>
</tr>
<tr>
<td></td>
<td>Assess for high-residual volume of urine in bladder despite incontinence (measured with bladder scan or in/out catheter)</td>
</tr>
<tr>
<td></td>
<td>Consider intermittent self-catheterisation (or in/out catheter by nursing staff) or permanent IDC</td>
</tr>
<tr>
<td></td>
<td>Where overflow incontinence is present, consider creatinine level given risk of bilateral hydronephrosis secondary to incomplete bladder emptying. If creatinine deteriorating, consider catheter as above</td>
</tr>
<tr>
<td></td>
<td>A trial of alpha blocker (eg, doxazosin, terazosin) may add small benefit in men with overflow incontinence with BPH</td>
</tr>
<tr>
<td></td>
<td>Prescribe medication alongside scheduled voiding and double voiding schedule</td>
</tr>
<tr>
<td>Functional</td>
<td>Problems with thinking, moving or communication that prevents the resident reaching a toilet, although the urinary system is normal</td>
</tr>
<tr>
<td></td>
<td>May not recognise the need to go to the toilet, where the toilet is, or get there on time. Urine loss may be large</td>
</tr>
<tr>
<td></td>
<td>Causes include confusion, dementia, poor eyesight, poor mobility, poor dexterity, unwillingness to toilet because of depression, anxiety or anger.</td>
</tr>
<tr>
<td></td>
<td>Mental confusion may prevent both recognition of the need to void and finding a bathroom</td>
</tr>
<tr>
<td></td>
<td>Scheduled toileting</td>
</tr>
<tr>
<td></td>
<td>Bedside commode/hand-held urinal</td>
</tr>
</tbody>
</table>
Urinary tract infection | Te pokenga ara mīmimi

Is the resident symptomatic?

Urinary tract infection is the most common bacterial infection in residents in residential care facilities. Asymptomatic bacteriuria is not treated with antibiotics, except in certain circumstances, eg, prior to surgery where it may increase post-operative risk. There is no discernible benefit to the resident (when there is bacteria in the urine without symptoms) and there are risks of antimicrobial resistance and drug reactions.

Definition of urinary tract infection

- Include only symptomatic UTI
- Surveillance of asymptomatic bacteriuria is not recommended because this represents a baseline status for many residents

Symptomatic UTI: one of the following criteria must be met

1. Non-catheterised:
   Evaluate for symptomatic UTI by adding up points of signs/symptoms present: the resident needs to score 3 or more from signs and symptoms:
   - Fever > 37.8°C, or repeated readings of > 37.2°C, or 1°C above normal from any site and/or chills
   - New or increased burning or pain on voiding
   - New flank or suprapubic pain or tenderness
   - Worsening of mental or functional status
   - Deteriorating renal function (may be due to multiple reasons).

2. The person with an indwelling urinary catheter has at least 2 of the following signs or symptoms:
   - Fever > 37.8°C, or repeated readings of > 37.2°C, or 1°C above normal from any site and/or chills
   - New or increased burning or pain or tenderness
   - New flank or suprapubic pain or tenderness
   - Worsening of mental or functional status
   - Deteriorating renal function (may be due to multiple reasons).

Consider other causes

If there are 2 or more symptoms of non-urinary infection DO NOT order a urine culture.
Collection of MSU
A urine specimen can take some time to collect. Alerting staff as soon as a UTI is suspected will assist in getting a specimen before any treatment is started. A urine specimen should always be obtained prior to treatment because a negative culture is useful to exclude a UTI. A positive urine culture will show the microorganisms’ sensitivity to antibiotics, allowing for judicious prescribing. Antimicrobial’s sensitivity to antibiotics is becoming increasingly problematic in residential aged care, increasing the importance of optimising antimicrobial therapy.

Treatment options
Treatment options need to be individualised for each resident. Deciding when to start antibiotics can be challenging. Possible treatment may include the following:

- **Resident symptomatic but not unwell:**
  - Wait for urine result but continue to monitor.

- **Resident symptomatic and unwell:**
  - Notify GP/NP.
  - Start antibiotics while waiting for MSU results.
  - Eligible for phone order.

- **Resident critically unwell or deteriorating rapidly:**
  - Contact NP/GP ASAP.
  - Are they for palliative care? Activate palliative care plan.
  - Call ambulance to transfer to acute care and complete transport documentation.

Prevention strategies
- Adequate hydration to meet daily requirements
- Attention to perineal hygiene and continence management
- D-Mannose to reduce *E. coli* adherence to the bladder wall
- Avoid catheterisation
- Consider atrophic vaginitis and oestrogen cream treatment, if resident continues to suffer multiple UTIs.

Continue to monitor for change in status and act accordingly
Consider risks, care plan, previous allergies and treatment history, communication with EPOA, welfare guardian, representatives.
Non-catheterised resident

Determine if the person symptomatic

- Positive urine
  - $10^5$ colony forming units/ml
  - Or pending
  - Symptoms meet definition for UTI
    - Y
    - Y
    - Commence treatment
  - N

- Negative urine
  - Consider other causes
    - Continue to monitor
    - Consider prevention strategies (see page 127)
  - Do not treat for UTI

Is the person symptomatic?
See page 125 for symptomatic versus asymptomatic

- Assess and record baseline observations and new or worse signs and symptoms
  - Do signs and symptoms meet the definition for UTI?
    - The person needs to score 3 or more points from signs and symptoms:
      - Fever $> 37.8^\circ$C, or repeated readings of $> 37.2^\circ$C, or 1°C above normal from any site and/or chills
      - New or increased burning or pain on urination, frequency or urgency
      - New flank, suprapubic pain or tenderness
      - Change in character of urine
      - Worsening of mental or functional status
    - Y
    - N

- Notify NP/GP
  - Is there an independent care plan that covers this scenario?
    - Y
    - Implement care plan
    - N
    - Initiate collection of MSU or clean catch urine specimen AND contact GP/NP to discuss assessment
      - Discuss possible care plan with GP/NP. Consider risks and resident goals (see page 126 for possible options)
Depression | Te pōuritanga

Symptoms based on DSM-III

Five of the following nine symptoms must be present for most of the day and for longer than two weeks to indicate a major depressive disorder. One of the symptoms must be depressed mood or diminished interest. Fewer than 5 symptoms of less intensity or duration of symptoms could still indicate a milder form of depression or adjustment disorder:

1. Depressed mood, feels sad, empty, hopeless, or appears sad and tearful to others
2. Diminished interest or pleasure (family/whānau, friends, usual hobbies or activities, sex)
3. Significant weight loss or gain (> 5 percent of body weight in 1/12)
4. Sleep disturbance (usually insomnia but can be hypersomnia)
5. Fatigue or loss of energy
6. Psychomotor agitation or retardation (observable by others)
7. Feelings of worthlessness or excessive or inappropriate guilt
8. Uncharacteristic indecisiveness or problems with concentration
9. Recurrent thoughts of death or suicidal ideas (with or without plan or intent).

Note:
In older people, the symptoms are often noticed by others (family/whānau, friends) rather than reported by the individual. Somatic (physical) symptoms also commonly occur in the older person with depression.

Risk factors

- Psychosis, eg, delusional/paranoid thoughts, hallucinations
- History of depression either personal or family history
- History of depression, current substance abuse (especially alcohol), previous coping style
- Recent losses or crises, eg, death of spouse, friend, pet, retirement, anniversary dates, move to another residence or nursing home, changes in physical health status, relationships or roles
- In elderly people, frequent somatic complaints may actually represent an underlying depression
- Chronic pain
- Diseases, eg, respiratory, cardiac, stroke, cancer.
Assessment

- Describe presenting symptoms, including: onset, duration, character, aggravating and alleviating factors, severity. Symptoms may vary throughout the day (diurnal variation)
- Are there any triggers? Note any contextual psycho-social stressors
- Any previous history of depression or any family history?
- Take a brief social history, eg, living arrangements/conditions, family supports, income, activities, note any significant history including history of trauma
- Alcohol and/or drug use – current and past
- Relevant medical information, present and past, eg, anaemia, thyroid dysfunction, hypocalcaemia or hypercalcaemia, hypoglycaemia, B12 or folate deficiency, infections, lung or heart disease
- Review recent medical investigations
- Current medication, particularly and potentially depressive agents, eg, benzodiazepines, antihypertensives, narcotics, sedatives, opiates
- Review physical health systems and arrange for, or complete, neurological and any other relevant physical examination
- Mental state assessment (BATOMI) and complete depression screening tool, such as GDS or CSSD
- Assess cognitive function – consider MoCA
- Refer to mental health services, if assessment indicates that a major depressive disorder is likely and/or if suicide ideation is present.

Anxiety, while a separate diagnostic entity, is strongly linked to depression

Anxiety is an arousal state. People experience anxiety in different ways, but the following three elements are considered to be common symptoms:

- A conscious feeling of fear and danger without the ability to identify immediate objective threats that could account for these feelings
- A disruption or disorganisation of effective problem-solving and mental control, including difficulty in thinking clearly and coping effectively with environmental demands
- A pattern of physiological arousal and bodily distress that may include miscellaneous physical changes and complaints, such as heart palpitations, faintness, feeling of suffocation, breathlessness, diarrhoea, nausea or vomiting.
### Geriatric depression scale (short form)

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are you basically satisfied with your life?</td>
<td>YES = 0</td>
<td>NO = 1</td>
</tr>
<tr>
<td>2</td>
<td>Have you dropped many of your activities and interests?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>3</td>
<td>Do you feel that your life is empty?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>4</td>
<td>Do you often get bored?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>5</td>
<td>Are you in good spirits most of the time?</td>
<td>YES = 0</td>
<td>NO = 1</td>
</tr>
<tr>
<td>6</td>
<td>Are you afraid that something bad is going to happen to you?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>7</td>
<td>Do you feel happy most of the time?</td>
<td>YES = 0</td>
<td>NO = 1</td>
</tr>
<tr>
<td>8</td>
<td>Do you often feel helpless?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>9</td>
<td>Do you prefer to stay at home rather than going out and doing new things?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>10</td>
<td>Do you feel you have more problems with memory than most?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>11</td>
<td>Do you think it is wonderful to be alive now?</td>
<td>YES = 0</td>
<td>NO = 1</td>
</tr>
<tr>
<td>12</td>
<td>Do you feel pretty worthless the way you are now?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>13</td>
<td>Do you feel full of energy?</td>
<td>YES = 0</td>
<td>NO = 0</td>
</tr>
<tr>
<td>14</td>
<td>Do you feel that your situation is hopeless?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
<tr>
<td>15</td>
<td>Do you think that most people are better off than you?</td>
<td>YES = 1</td>
<td>NO = 0</td>
</tr>
</tbody>
</table>

Answers in **BOLD** indicate depression.

A score > 5 points is suggestive of depression and warrants follow-up comprehensive assessment.

A score > 10 points is almost always indicative of depression.
## Depression screening

### Cornell scale for depression in dementia

Ratings should be based on symptoms and signs occurring during the week before interview. No score should be given if symptoms result from physical disability or illness.

<table>
<thead>
<tr>
<th>Symptom/sign</th>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A Mood-related signs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Anxiety; anxious expression, rumination, worrying</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>2 Sadness; sad expression, sad voice, tearfulness</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>3 Lack of reaction to pleasant events</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>4 Irritability; annoyed, short-temperated</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td><strong>B Behavioural disturbance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Agitation; restlessness, hand-wringing, hair-pulling</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>6 Retardation; slow movements, slow speech, slow reactions</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>7 Multiple physical complaints (score 0 if GI symptoms only)</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>8 Loss of interest; less involved in usual activities (score 0 only if change occurred acutely, ie, in less than 1 month)</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td><strong>C Physical signs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Appetite loss; eating less than usual</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>10 Weight loss (score 2 if greater than 2.3 kg/5 pounds in 1 month)</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>11 Lack of energy; fatigues easily, unable to sustain activities</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td><strong>D Cyclic functions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Diurnal variation of mood; symptoms worse in the morning</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>13 Difficulty falling asleep; later than usual for this individual</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>14 Multiple awakenings during sleep</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>15 Early-morning awakening; earlier than usual for this individual</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td><strong>E Ideational disturbance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Suicide; feels life is not worth living</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>17 Poor self-esteem; self-blame, self-depreciation, feelings of failure</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>18 Pessimism; anticipation of the worst</td>
<td>A 0 1 2</td>
<td></td>
</tr>
<tr>
<td>19 Mood-congruent delusions; delusions of poverty, illness or loss</td>
<td>A 0 1 2</td>
<td></td>
</tr>
</tbody>
</table>

### Scoring system

- **A** = unable to evaluate
- **0** = absent
- **1** = mild to intermittent
- **2** = severe

Score > 12 = probably depression

---

Refer to secondary services if there are suicidal ideas or moderate-to-severe symptoms are present.
Intervention

- Institute safety precautions for suicide risk, as per institutional policy – ensure continuous surveillance of resident while obtaining an emergency psychiatric evaluation and disposition.
- Remove or control risk factors: consult with GP/NP to avoid/remove/change medicines that can worsen depression; work with GP/NP to correct/treat physical/metabolic/systemic medical issues.
- Monitor and promote nutrition, elimination, sleep/rest patterns, physical comfort especially pain control.
- Enhanced physical function, eg, structure regular exercise/activity, refer to physical occupation, recreational therapies, develop a daily activity schedule.
- Enhance social support, eg, identify/mobilise a support person, eg, family, confidante, friends, facility resources, support groups, resident visitors; ascertain need for spiritual support and contact appropriate clergy.
- Maximise autonomy/personal control/self-efficacy, eg, include patient in active participation in making daily schedules and setting short-term goals.
- Identify and reinforce strengths and capabilities.
- Structure and encourage daily participation in relaxation therapies, pleasant activities (conduct a pleasant activity inventory) and music therapy.
- Monitor and document responses to medication and other therapies; re-administer depression screening tool.
- Provide practical assistance, help with problem-solving.
- Provide e-therapy (beating the blues) and other self-help resources.
- Discuss pharmacological treatments with GP/NP. SSRIs are first line of treatment.
- Ensure mental health community link-up; consider psychiatric, nursing-home care intervention.
- Provide information about physical illness and treatment(s) and about depression, eg, that depression is common, treatable and not the person’s fault.
- Provide emotional support, eg, empathic, supportive listening, encourage expression of feelings and hope instillation, support adaptive coping and encourage pleasant reminiscence.

Depression medication

<table>
<thead>
<tr>
<th>First line treatment</th>
<th>Useful for patients with depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sertraline</td>
<td>Useful for those with anxiety, can cause hyponatraemia</td>
</tr>
<tr>
<td>Citalopram</td>
<td></td>
</tr>
<tr>
<td>Escitalopram</td>
<td></td>
</tr>
<tr>
<td>Fluoxetine</td>
<td></td>
</tr>
<tr>
<td>Paroxetine</td>
<td></td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>Useful for insomnia, weight loss, reduced appetite, give at night, causes weight gain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second line treatment</th>
<th>Useful for patients with depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitriptyline</td>
<td>Used for insomnia, severe depression or comorbid pain, has anticholinergic side effects</td>
</tr>
<tr>
<td>Clomipramine</td>
<td></td>
</tr>
<tr>
<td>Dosulepin (Dothiepin)</td>
<td></td>
</tr>
<tr>
<td>Imipramine</td>
<td></td>
</tr>
<tr>
<td>Nortriptyline</td>
<td></td>
</tr>
<tr>
<td>Venlafaxine</td>
<td>Used in severe depression or treatment-resistant depression</td>
</tr>
</tbody>
</table>
Defining and recognising frailty


Acute deterioration


Gradual deterioration


Last days of life – recognising dying


Advance treatment planning


Enduring power of attorney (EPOA)


Capacity assessment


Communication


Deprescribing and polypharmacy


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Congestive heart failure


Constipation and gastrointestinal


Delirium


Dementia


Behaviours that challenge


Diabetes


Falls prevention


Fractures and contractures


Nutrition and hydration


Pain assessment and management

Respiratory care guide

Skin wounds


Sexuality and intimacy


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**Depression**

