

# Gradual deterioration | Te āta tauheke haere

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

Increased falls	<ul style="list-style-type: none"> <li>• Triggered interRAI falls CAP</li> <li>• <a href="#">Falls prevention frailty care guide</a></li> </ul>
New urinary or bowel incontinence	<ul style="list-style-type: none"> <li>• Triggered interRAI urinary CAP</li> <li>• Triggered bowel continence CAP</li> <li>• <a href="#">Urinary incontinence</a> and <a href="#">constipation frailty care guides</a></li> </ul>
Increased urinary or respiratory tract infections	<ul style="list-style-type: none"> <li>• Review infection rates and antibiotic use</li> <li>• Review <a href="#">urinary incontinence, constipation and gastrointestinal</a>, and <a href="#">respiratory frailty care guides</a></li> <li>• Review <a href="#">advance treatment planning frailty care guide</a></li> </ul>
interRAI CHES score	<ul style="list-style-type: none"> <li>• See interRAI CHES score</li> <li>• Review <a href="#">advance treatment planning frailty care guide</a></li> </ul>
Frailty score increased	<ul style="list-style-type: none"> <li>• Triggered physical activity CAP</li> <li>• See <a href="#">defining and recognising frailty frailty care guide</a>: clinical frailty score or FRAIL-NH</li> <li>• Comprehensive assessment to assess for reversibility of any geriatric syndrome</li> </ul>
Pain	<ul style="list-style-type: none"> <li>• Triggered interRAI pain CAP</li> <li>• Review interRAI pain scale</li> <li>• <a href="#">Pain assessment and management frailty care guide</a></li> </ul>
Non-healing wounds or pressure ulcers	<ul style="list-style-type: none"> <li>• Triggered interRAI pressure ulcer CAP</li> <li>• Review interRAI pressure ulcer risk score</li> <li>• <a href="#">Skin wounds frailty care guide</a></li> </ul>
Weight loss	<ul style="list-style-type: none"> <li>• Triggered interRAI under-nutrition CAP</li> <li>• Review BMI interRAI scale</li> <li>• <a href="#">Nutrition and hydration frailty care guide</a></li> </ul>
Low mood or anxiety	<ul style="list-style-type: none"> <li>• Triggered mood interRAI CAP</li> <li>• Review interRAI depression rating scale</li> <li>• Review <a href="#">depression frailty care guide</a></li> </ul>
New behaviours of concern	<ul style="list-style-type: none"> <li>• Triggered interRAI behaviour CAP</li> <li>• Review interRAI aggressive behaviour scale</li> <li>• <a href="#">Dementia and behaviours that challenge frailty care guide</a></li> </ul>
Delirium episodes	<ul style="list-style-type: none"> <li>• Triggered delirium interRAI CAP</li> <li>• <a href="#">Delirium frailty care guide</a></li> </ul>

*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 – CHES

Score	Item
0–2, 8	Change in decision making
0–3	Change in ADL status
0–2, 8	Change in ADL status
0–4	Health condition — vomiting
0–4	Health condition — peripheral edema
0–3	Health condition — dyspnea
0,1	End-stage disease
0,1	Weight loss
0,1	Insufficient fluid
0,1	Dehydrated
0,1	Decrease in food or fluid
0,1	Fluid output exceeds input

0 = No health instability  
 1 = Minimal health instability  
 2 = Low health instability  
 3 = Moderate health instability  
 4 = High health instability  
 5 = Very high health instability

The CHES 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 CHES score of 5.

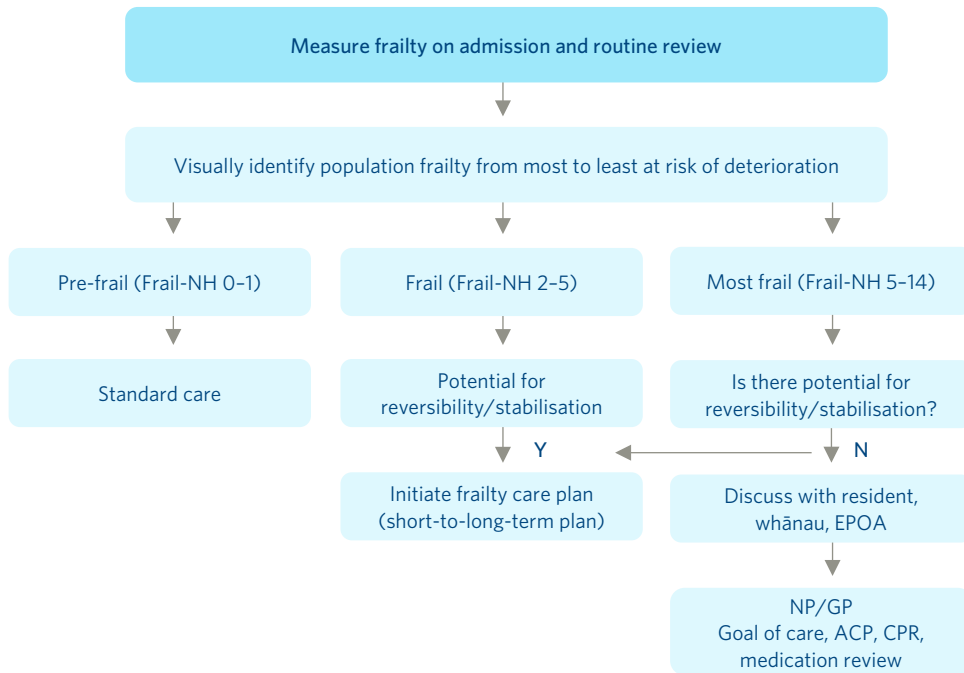
Source: Hirdes JP, Frijters D, Teare G. 2003. The MDS CHES Scale: A New Measure to Predict Mortality in the Institutionalized Elderly. *Journal of the American Geriatrics Society* 51(1): 96–100.

### FRAIL-NH

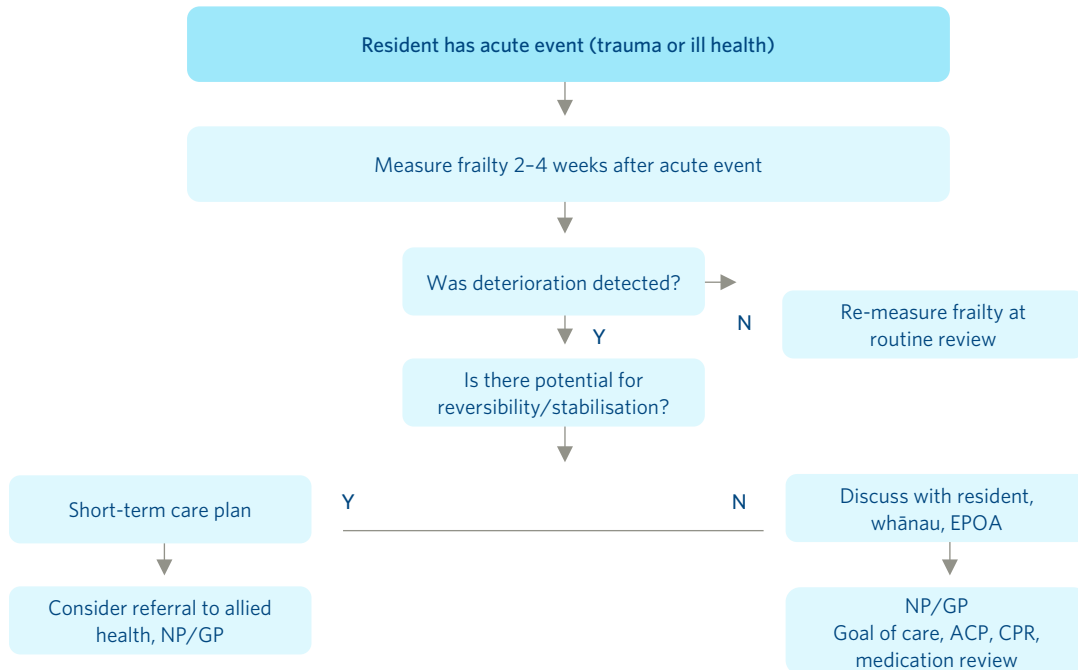
A simple assessment of frailty particularly for aged residential care residents. Items from the interRAI assessment can be used as part of this assessment. It also correlates with mortality (Kaehr et al 2016).

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

Identify and treat gradual deterioration



Identify and treat frailty progression after acute event



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](http://www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Resident_review_form_FCG_final.docx)

## Short-term care plan example

Available as an editable Word document example

([http://www.hqsc.govt.nz/assets/ARC/PR/Frailty\\_care\\_guides/Short-term\\_care\\_plan\\_example\\_FCG\\_final.docx](http://www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Short-term_care_plan_example_FCG_final.docx)) or as an editable Word template

([http://www.hqsc.govt.nz/assets/ARC/PR/Frailty\\_care\\_guides/Short-term\\_care\\_plan\\_example\\_template\\_FCG\\_final.docx](http://www.hqsc.govt.nz/assets/ARC/PR/Frailty_care_guides/Short-term_care_plan_example_template_FCG_final.docx)).

### Short-term care plan **EXAMPLE**

Identification label

Start date:	Resident identified as frail – slow (potentially reverse) progression of frailty syndrome. Frail NH score: .....	
Goal:	Intervention: <i>How will we do that?</i>	Evaluation: <i>Did it work?</i>
Measurable gain in lean muscle mass in four weeks	<ul style="list-style-type: none"> <li>Ensure eats 2g/kg/day protein (sources include milk, supplements, whey powder, meat, nuts)</li> <li>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)</li> <li>Monitor food intake (food charting, 'blue plate' system, weigh weekly)</li> <li>Referral for professional assessment</li> <li>Work with family regarding additional nutritional treats, eg, trip out to eat, bring food in, extra stuff aged residential care can't supply</li> </ul>	<b>Date:</b>
Measurable gain in strength in four weeks	<ul style="list-style-type: none"> <li>Physiotherapy assessment for individual activity plan; includes strength and stamina training</li> <li>Intense support to implement PT plan</li> <li>Agree small specific daily activities that increase activity</li> <li>Measure against baseline activity at weekly intervals</li> </ul>	
Optimise medication regime	Work with NP/GP to: <ul style="list-style-type: none"> <li>review BP (lower BPs in frail older adults have worse outcomes)</li> <li>optimise analgesia</li> <li>consider mental health prescribing (depression worsens fatigue, as does hyponatraemia ADE)</li> <li>consider vitamin D prescribing</li> </ul>	
Optimise medical management	Review and work with NP/GP to optimise chronic condition management (eg, inhalers and SOB, glucose and DM, fluids and HF, rest and sleep cycle, cognition and activities)	

## Bibliography | Te rārangi pukapuka

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Hirdes JP, Frijters DH, Teare GF. 2003. The MDS-CHESS scale: a new measure to predict mortality in institutionalized older people. *Journal of the American Geriatrics Society* 51(1): 96-100. DOI: 10.1034/j.1601-5215.2002.51017.x

interRAI New Zealand. (nd). interRAI New Zealand. URL: <https://www.interrai.co.nz/> (accessed 30 May 2019).

Morley JE, Vellas B, van Kan GA, et al. 2013. Frailty consensus: a call to action. *Journal of the American Medical Directors Association* 14(6): 392-7. DOI: 10.1016/j.jamda.2013.03.022