Frailty - Identification

Medicine > Elderly care > Frailty

- Frailty suspected
  - Presents with a "Frailty Syndrome"
  - Opportunistic screening
    - Timed-up-and-go test
    - PRISMA 7 questionnaire

- Clinical assessment
  - History
  - Clinical examination
  - MUST nutritional assessment
  - Cognitive assessment
  - Investigations

- Frailty present or absent
  - Frailty present
  - Frailty absent
    - No previous InterRAI assessment
    - Previous InterRAI assessment
      - Previous InterRAI assessment does not reflect current status and / or condition
      - Previous InterRAI assessment reflects current status and / or condition
        - Review within six months
        - Go to Frailty - Management

- Go to Frailty - Management

Care map information
Information resources for patients and carers
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Hauora Māori
Pasifika

This map was published by MidCentral District. A printed version of this document is not controlled so may not be up-to-date with the latest clinical information.
1. Care map information

Identification of older people with frailty.

Scope:
• adults aged 65 years and over
• Māori and Pasifika adults aged 55 and over
• adults aged 50-64 who have functional needs similar to those of people over 65:
  • phone Supportlinks 0800 221411 to discuss eligibility

Out of scope:
• last days of life when a judgement is made that death is imminent
• management of frailty

Definitions:
Frailty is a long term condition and is a health state that occurs with ageing resulting in the loss of reserve of multiple body systems. This loss of reserve leaves an individual vulnerable to dramatic changes in their physical and mental health, often as a result of a relatively minor insult [1].

Incidence and prevalence:
Frailty increases with age, especially over the age of 85. Using data from the 2001 Living Standards of Older New Zealanders Survey [10], the estimated prevalence of frailty in those aged over the age of 65 is 8.1% and in those over the age of 85 it is 20-25%.

Aetiology:

Frailty occurs as a result of interaction between:
1. sarcopenia:
   • criteria for the diagnosis of sarcopenia:
     • diagnosis is based on documentation of criterion 1 plus criterion 2 and/or criterion 3:
       • 1. low muscle mass
       • 2. low muscle strength
       • 3. low physical performance
     • ageing is a risk factor for sarcopenia but in older people sarcopenia is usually multifactorial in aetiology

AND
2. an accumulation of deficits:
   • examples of deficits:
     • physiological such as:
       • increasing age
       • inadequate nutrition
       • anaemia
     • medical co-morbidity such as:
       • cardiovascular disease
       • dementia
       • cerebrovascular disease
       • cancer
     • medicines related harm due to multiple medications
     • inappropriate polypharmacy (harm outweighs benefits):
       • inappropriate polypharmacy is defined as - the prescribing of multiple medicines inappropriately, or where the intended
The identification of frailty is important because its presence is associated with adverse outcomes. As a result of a decline in an individual’s physical and psychological reserves, a relatively minor event, such as starting a new drug, change in environment, constipation or infection, can lead to rapid decompensation and precipitate a crisis, which often precipitates a hospital admission which can exacerbate and prolong the crisis.

By identifying frailty, the clinician can then judge the benefits and risks of an intervention or treatment.

2. Information resources for patients and carers

Recommended resources for patients and carers

- functional performance:
  - MDHB information booklet for patients on how to conserve energy and simplify housework
  - a simple checklist to identify hazards in the home
  - information on keeping safe at home
  - Eating for Healthy Older People
  - Tips to gain weight
  - How to overcome a poor appetite
  - Oral nutrition supplements
  - EASIE Living Centre, 585 Main Street, Palmerston North
- World Health Organisation recommended levels of physical activity for adults aged 65 and above
- SeniorNet is a community training network that supports and motivates people aged 50+ to enjoy and use technology in their everyday lives
- Ageing Well
- clinical issues:
  - Continence information sheet for patients - where to purchase continence products (MidCentral Health)
- social life:
  - social isolation:
    - Age Concern's Accredited Visiting Service is a befriending service that provides regular visits to older people who would like more company
    - contact local Citizen's Advice Bureau for information about clubs, services etc
    - Levin Mobility Scooter Group
    - Horizons Manawatu - subsidised taxi scheme
    - Mobility parking cards
  - abusive relationships:
    - for general information contact Age Concern NZ
    - Manawatu Age Concern (includes Tararua district) 06-355 2832
    - Horowhenua Age Concern 06-367 2181
  - alcohol:
    - Alcohol and older people - What you need to know (Health Promotion Agency)
  - cognition and mental health:
    - The depression website - resources for health providers, carers and family
  - advance care planning and enduring power of attorney:
3. Resources for providers

Recommended resources for providers:
- Supportlinks referral form
- New Zealand Medicine Formulary - Prescribing for the elderly
- Advance Care Planning Pathway
- Enduring Power of Attorney (Ministry of Social Development)

Recognised screening tool:
- MUST Calculator - click on 'Objective Measurements'

Recognised assessment tools:
- mood:
  - Geriatric Depression Scale (Short Form Scoring)
  - K10 Clinical Assessment Form - Primary Care Psychology
- cognitive:
  - MoCA tool and instructions

4. Updates to this care map

Date of publication: August 2016.

Please see the care map's Provenance for information on references, accreditations from national clinical bodies, contributors, publication schedule, and the editorial methodology.

5. Hauora Māori

Māori are a diverse people and whilst there is no single Māori identity, it is vital practitioners offer culturally appropriate care when working with Māori whānau. It is important for practitioners to have a baseline understanding of the issues surrounding Māori health.

This knowledge can be actualised by (not in any order of priority):
- acknowledging Te Whare Tapa Whā (Māori model of health) when working with Māori whānau
- asking Māori clients if they would like their whānau or significant others to be involved in assessment and treatment
- asking Māori clients about any particular cultural beliefs they or their whānau have that might impact on assessment and treatment of the particular health issue (Cultural issues)
- consider the importance of whānaungatanga (making meaningful connections) with their Māori client / whānau
- knowledge of Whānau Ora, Te Ara Whānau Ora and referring to Whānau Ora Navigators where appropriate
- having a historical overview of legislation that has impacted on Māori well-being

For further information:
- Hauora Māori
- Central PHO Maori Health website
6. Pasifika

Pacific Cultural Guidelines (Central PHO) 6MB file

Our Pasifika community:

- is a diverse and dynamic population:
  - more than 22 nations represented in New Zealand
  - each with their own unique culture, language, history, and health status
  - share many similarities which we have shared with you here in order to help you work with Pasifika patients more effectively

The main Pacific nations in New Zealand are:

- Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau and Tuvalu

Acknowledging The FonoFale Model (pasifika model of health) when working with Pasifika peoples and families.

Acknowledging general pacific guidelines when working with Pasifika peoples and families:

- Cultural protocols and greetings
- Building relationships with your pasifika patients
- Involving family support, involving religion, during assessments and in the hospital
- Home visits
- Contact information

Pasifika Health Service - Better Health for Pasifika Communities:

- the Pasifika Health Service is a service provided free of charge for:
  - all Pasifika people living in Manawatu, Horowhenua, Tararua and Otaki who have long term conditions
  - all Pasifika mothers and children aged 0-5 years
- an appointment can be made by the patient, doctor or nurse
- the Pasifika Health Service contact details are:
  - Palmerston North Office - 06 354 9107
  - Horowhenua Office - 06 367 6433
- Better Health for Pasifika Communities brochure

Additional resources:

- Ala Mo'ui - Paths to Pacific Health and Wellbeing 2010-2014
- Primary care for pacific people: a pacific health systems approach
- Tupu Ola Moui: The Pacific Health Chart Book 2004
- Pacific Health resources
- List of local Maori/Pacific Health Providers
- Central PHO Pacific Health website

7. Frailty suspected

The identification of frailty is important because its presence is associated with adverse outcomes.

As a result of a decline in an individual's physical and psychological reserves a relatively minor event such as starting a new drug, a change in environment, constipation, infection can lead to rapid decompensation and precipitate a crisis, which often precipitates a hospital admission which can exacerbate and prolong the crisis.

By identifying frailty the clinician can then judge the benefits and risks of an intervention or treatment.
8. Presents with a “Frailty Syndrome”

Ideally, opportunistic screening will identify older people with frailty and lead to the implementation of an individualised care and support plan developed in conjunction with them and their families. However, often the first presentation of an older person with frailty is with one of the ‘frailty syndromes’.

**Presents with a Frailty Syndrome**

Previously known as ‘the geriatric giants’ or ‘geriatric syndromes’, these are well recognised symptoms and their presence might be an indicator of underlying frailty.

Any older person presenting with one or more of these frailty syndromes should be screened for frailty. Often frailty syndromes can lead to a crisis and it is important that a careful clinical assessment is undertaken to exclude underlying medical conditions such as infection or myocardial infarction.

Frailty syndromes [4]:

- falls (e.g. collapse, legs gave way, ‘found lying on floor’)
- immobility (e.g. sudden change in mobility, ‘gone off legs’, ‘stuck in toilet’)
- delirium (e.g. acute confusion, ‘muddledness’, sudden worsening of confusion in someone with previous dementia or known memory loss)
- incontinence (e.g. change in continence – new onset or worsening of urine or faecal incontinence)
- susceptibility to side effects of medicines and the complications associated with the use of multiple medicines (inappropriate polypharmacy)

For more information, see the following pathways:

- Falls in Older People
- Delirium management in primary care

9. Opportunistic screening

**Opportunistic screening:**

- any ED attendance over 80 or over 70 for Māori and Pasifika
- InterRAI Clinical Assessment Protocols triggered
- referral for personal care
- patient who is eligible for EnhancedCare+
- any contact with a health care professional where the health care professional has concerns
- family or carer concerns
- changing social circumstances / support network
- use multiple medicines
- have multiple prescribers managing their care
- are prescribed medicines commonly associated with adverse events in the elderly

See [New Zealand Medicine Formulary - Prescribing for the elderly](#) for more information.

10. Timed-up-and-go test

**The timed-up-and-go (TUG) test:**

- ask the patient to get up from their chair without using their arms, a walking aid can be used during the test (if the patient is already using one)
- walk three metres, turn around, return to the chair, and sit down without using their arms if possible
• the test is timed
• if the patient can complete the test with no difficulty, and no unsteadiness - low risk of falling
• if TUG takes longer than 13 seconds, further assessment is required

11. PRISMA 7 questionnaire

The PRISMA 7 is a seven-item, self-completion questionnaire. One point can be scored for each of the seven questions and a score of 3 points or more is considered to identify frailty.

The “PRISMA 7” questions:

• are you more than 85 years? yes = 1, no = 0
• male? yes = 1, no = 0
• in general do you have any health problems that require you to limit your activities? yes = 1, no = 0
• do you need someone to help you on a regular basis? yes = 1, no = 0
• in general do you have any health problems that require you to stay at home? yes = 1, no = 0
• in case of need, can you count on someone close to you? yes = 0, no = 1
• do you regularly use a stick, walker or wheelchair to get about? yes = 1, no = 0

12. Clinical assessment

A focused clinical assessment by the General Practice Team should be undertaken to identify readily reversible / treatable causes of decline in function:

• the assessment is expected to take around 30 mins

Focused clinical assessment should include:

• history
• clinical examination
• MUST nutritional assessment
• cognitive assessment
• investigations

13. History

History taking relevant to the presenting problem should consider:

• infection
• mood:
  • recognised assessment tools include:
    • Geriatric Depression Scale (Short Form Scoring)
    • K10 Clinical Assessment Form - Primary Care Psychology
• falls
• changes in mobility or functional level
• medicine changes
• reports from family, friends, other observers
• alcohol intake:
  • one screening tool available is the Short Michigan Alcohol Screening Test - Geriatric Version (SMAST G)
14. Clinical examination

Clinical examination should include:

• cardiovascular:
  • heart rate
• postural blood pressure:
  • lying supine for 5 minutes, take BP reading, ask patient to stand, take BP at 1 minute and again at 3 minutes
  • a 20mmHg drop in the systolic BP, a 10mmHg drop in the diastolic BP or a systolic drop of BP below 90mmHg, indicates postural hypotension
  • signs of heart failure
• respiratory:
  • rate
  • focal changes on auscultation
  • pulse oximetry (if available)
• abdominal:
  • organ enlargement
  • masses
  • exclude constipation and retention
• musculoskeletal:
  • gait
  • local joint problems
• neurological:
  • balance
  • co-ordination
  • weakness

15. MUST nutritional assessment

Malnutrition universal screening tool (MUST) is a three question screening tool to identify adults who are malnourished or at risk of malnutrition (undernutrition).

MUST Calculator - click on 'Objective Measurements'

MUST results management - score of:

• 1 = provide person with the following information:
  • tips to gain weight
• 2 or greater = provide person with the following information:
  • tips to gain weight
  • how to overcome a poor appetite
• refer to Dietitian - include MUST score in referral information:
  • Central PHO Clinical Dietitians referral form
  • Gaye Philpott, registered dietitian specialising in elder health, referral form (private provider - fee applies)

16. Cognitive assessment

Cognitive and mood assessments:

Quick assessment of cognition using:
• MoCA tool and instructions
  • the Montreal Cognitive Assessment (MoCA) was designed as a rapid screening instrument for mild cognitive dysfunction and assesses different cognitive domains:
    • attention and concentration
    • executive function
    • memory
    • language
    • visuospatial skills
    • conceptual thinking
    • calculations
    • orientation
  • time to administer the MoCA is approximately 10 minutes
  • the total possible score is 30 points: a score of 26 or above is considered normal

If confusion suspected, assess using the Short Confusion Assessment Method (Short CAM):
  • can be used by healthcare professionals without a psychiatric background
  • useful for distinguishing between dementia and delirium
  • not useful for:
    • assessing the severity of delirium
    • serial measurements

Short Confusion Assessment Method (CAM):
  • feature 1: acute onset and fluctuating course (as determined by carer):
    • is there evidence of an acute change in mental status from the patient’s baseline?
    • does the (abnormal) behaviour fluctuate during the day, that is, tend to come and go, or increase and decrease in intensity?
  • feature 2: inattention:
    • does the patient have difficulty focusing attention, for example being easily distractible, or having difficulty keeping track of what is being said?
  • feature 3: disorganised thinking:
    • is the patient’s thinking disorganised or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?
  • feature 4: altered level of consciousness:
    • this feature is shown by any answer other than “alert” to the following question: Overall, how would you rate the patient’s level of consciousness?
      • alert (normal), vigilant (hyper-alert), lethargic (drowsy, easily aroused), stupor (difficult to arouse), or coma (unrousable)
* The diagnosis of delirium by the short CAM requires the presence of features 1 AND 2 and EITHER 3 or 4.

17. Investigations

Further tests may be required and could include:
  • urine analysis (dipstick)
  • blood tests:
    • especially full blood count
    • renal function
    • electrolytes
    • calcium
    • liver function
    • thyroid function
• second tier blood tests:
  • vitamin B12
  • ferritin
  • iron studies
  • C-Reactive protein
  • red cell folate
  • chest X-ray
  • ECG, especially to confirm rhythm abnormalities

19. Frailty present

Frailty is considered present if:
• patient has failed timed-up-and-go test
and/or:
  • PRISMA 7 questionnaire result is positive
and:
  • reversible and manageable conditions excluded

20. Frailty absent

Frailty is considered absent if:
• nothing is highlighted in clinical assessment
• timed-up-and-go test is normal i.e. ≤ 13 seconds
• PRISMA 7 negative

21. Review within six months

Manage and treat in accordance with clinical presentation:
• consider:
  • Advance Care Planning Pathway
  • [Enduring Power of Attorney](Ministry of Social Development)
• primary health care team review within 6 months
• recall added to patient management system

22. No previous InterRAI assessment

Needs referral to Supportlinks for InterRAI Comprehensive Assessment to be undertaken.

23. Previous InterRAI assessment

Consider:
• need for further InterRAI comprehensive assessment?
• has person’s status or condition changed since last InterRAI assessment?
• does InterRAI assessment reflect current condition?
24. Previous InterRAI assessment does not reflect current status and/or condition

Needs referral to Supportlinks for InterRAI Comprehensive Assessment to be repeated.

26. Refer to Supportlinks

Complete Supportlinks REFERRAL from General Practice or phone 0800 221 411 for information.

Document on the referral form "as per Frailty Pathway".
Overview

This document describes the provenance of MidCentral District Health Board’s Frailty Pathway. This localised pathway was last updated in August 2016.

One feature of the “Better, Sooner, More Convenient” (BSMC) Business Case, accepted by the Ministry of Health in 2010, was the development of 33 collaborative clinical pathways (CCP).

The purpose of implementing the CCP Programme in our DHB is to:

- Help meet the Better Sooner More Convenient Business Case aspirational targets, particularly the following:
  - Reduce presentations to the Emergency Department (ED) by 30%
  - Reduce avoidable hospital admissions to Medical Wards and Assessment Treatment and Rehabilitation for over-65-year-olds by 20%
  - Reduce poly-pharmacy in the over-65-year-olds by 10%
- Implement a tool to assist in planning and development of health services across the district, using evidence-based clinical pathways.
- Provide front line clinicians and other key stakeholders with a rapidly accessible check of best practice;
- Enhance partnership processes between primary and secondary health care services across the DHB.

Editorial methodology

This care map was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of Medicine editorial methodology. It has been checked by individuals with front-line clinical experience (see Contributors section of this document).

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

References

This care map has been developed according to the Map of Medicine editorial methodology. The content of this care map is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. This localised version of the evidence-based, practice-informed care map has been peer-reviewed by stakeholder groups and the CCP Programme Clinical Lead.


8 interRAI Clinical Assessment Protocols (CAPS). For use with community and long-term care assessment instruments. (v 9.1, 2010).


11 Supportive and Palliative Care Indicator Tool, available from http://www.scotland.gov.uk/Topics/Health/NHS-Scotland/LivingandDyingWell/SPICTool

MidCentral DHB’s Collaborative Clinical Pathway editors and facilitators worked with clinical stakeholders such as front-line clinicians and pharmacists to gather practice-based knowledge for its care maps.

**Working group members included:**
- Dr Syed Zaman, Consultant Physician, Medical Head ElderHealth, MidCentral Health (Secondary Care Clinical Lead)
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The following individuals also contributed to this care map:

This pathway was distributed widely for consultation and comments received have been acknowledged and taken into consideration in the final document.

**Disclaimers**

**Clinical Board Central PHO, MidCentral DHB**

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