MAY 19th 2026

Healthy Ageing and Frailty- Practical tips for Screening and Early Intervention

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Speakers
Dr Chris Bollen FRACGP
Jane Bollen RN

WentWest Progressing Health Now

phn WESTERN SYDNEY An Australian Government Initiative

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Agenda

Topic	Speakers	Time
Introduction to the Project and setting practice expectations	WentWest Gary Kassab	6:30-6:40pm
Introduce Mrs Andrews	Bollen Health Dr Chris Bollen / Jane Bollen	6:40-6:50pm
"Introduction to identifying/assessing Frailty and Sarcopenia"	Bollen Health Dr Chris Bollen	6:50pm – 7:50pm
Assessing muscle health	Bollen Health Dr. Chris Bollen / Jane Bollen	7:50pm-8:00pm
Short Break		8:00pm-8:10pm
Now I have identified Frailty, what do I do?	Bollen Health Dr Chris Bollen	8:10-8:25pm
Case study	Bollen Health Dr Chris Bollen	8:25pm-8:50pm
The QI project, Evaluation and Questions	Bollen Health Dr Chris Bollen / Jane Bollen	8:50pm-9:15pm

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Helping you deliver safe, effective, sustainable care while finding joy in your work.

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Myth busting today

- "Older People Are Always Frail and Dependent"
- "Ageing is unchangeable"
- "It's too late to build muscle after age 65"
- "Sorry, you are over 80 and nothing can be done"
- "Eggs are bad for my cholesterol and heart health"
- "A pill from my doctor will fix everything"

National Healthcare Ageing Day May 6 2026

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https://www.youtube.com/watch?v=FL_9HG_tWEM&t=5s

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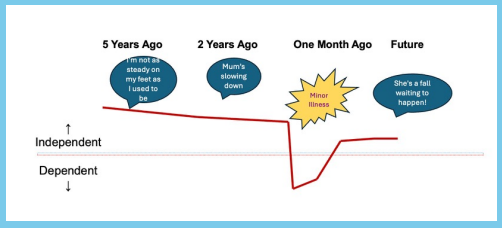
Functional Abilities Decline .....can we approach this differently?



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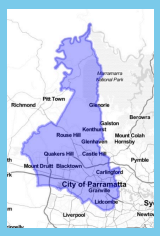
Why do we need to be here?

- People in Australia aged over 65 increasing:
  - 12% 2016-→ 17% 2021 → 20% 2031
  - Greater Sydney 15.2%
- Some suburbs are ageing more rapidly
- Healthy ageing is not equitable
- Predictors of **our** ageing commence early
- 75% GPs and nurses have no formal training in geriatric medicine/nursing
- …..Project group is 77%



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Why do we need to be here?

- Rates of Chronic Disease and Multimorbidity increasing
- 50% people aged 75+ on 8+ meds
- 40% people aged 75+ will have eGFR <60 (Chronic Kidney Disease)
- Multiple prescribers with single disease/organ focus
- Rarely is deprescribing occurring
- Improving function improves the whole!
- Muscle Health Matters!

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Why do we need to be here?

"Frailty is the most significant challenge to "ageing well' in Australia. More than 20% of people become frail as they age"

Professor Ruth Hubbard, Geriatrician

……..What does this all mean for your practice?

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Practice	Active 65+ population	% Active Population	Estimate 20% frail
A	2056	27%	412
B	2095	29%	420
C	511	25%	102
D	187	10%	38
E	332	8%	66
F	1271	15%	254
G	1170	27%	234
H	347	8%	70
I	144	12%	28
J	423	7%	84
K	94	7%	18
L	477	16%	96
M	772	13%	154
N	684	10%	136

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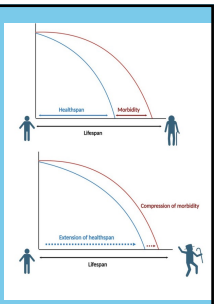
Why this frailty screening project?

- **Problem**
  - Most older Australians cared for in General Practice
  - 75% of GPs and nurses lack formal geriatric care training
  - Reliance on outdated software templates (1999)
  - Missed early intervention opportunities



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What is the biggest issue for you when working with older people?

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Frailty project: Needs analysis

- 38% rated self as good- excellent in current confidence in recognising frailty and its complications
- 5% used a validated screening tool for frailty
- 54% stated "Lack of Knowledge" a current barrier to incorporating frailty assessment into everyday encounters in primary care
- 68% rated self as having slight or no knowledge of frailty management/referral options
- 5% used a practice-based screening tool to assess muscle health

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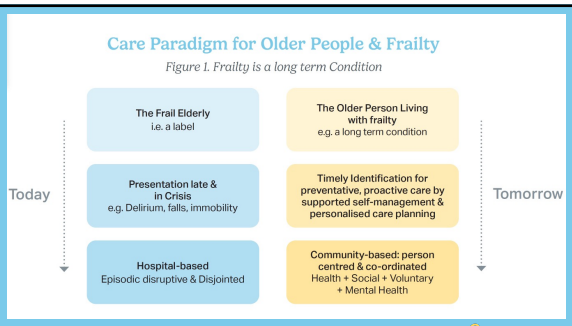
Care Paradigm for Older People & Frailty

Figure 1. Frailty is a long term Condition



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Learning outcomes

Recognise	… a person living with frailty
Learn	… to use evidence-based screening tools to recognise people with, or at risk of frailty
Understand	…the treatment options/referral pathways for frailty which can assist with reducing further decline
Engage	… your patients by creating the concept of "Muscle Health Checks" to support a proactive approach to Healthy Ageing

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What is frailty?

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Definition of Frailty:
Frailty Phenotype *(Dr Linda Fried 2001)*

Operationally defined as:

"A clinical syndrome in which **three or more** of the following are present:

- unintentional weight loss (>4.5kgs in last year)
- self-reported exhaustion
- weakness (grip strength)
- slow walking speed
- low physical activity"

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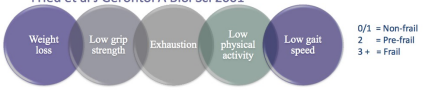
Frailty v sarcopenia phenotype

Frailty is multisystem impairment associated with increased vulnerability to stressors operationalised as below
Fried et al J Gerontol A Biol Sci 2001



Sarcopenia is the loss of muscle mass and strength or physical performance associated with increasing age
Cruz-Jentoft et al EWGSOP Consensus Guidelines Age Ageing 2010

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Rockwood's deficit model of frailty

- Memory & cognitive problems
- Cerebrovascular disease
- Dizziness
- Parkinsonism & tremor
- Mono/hemiparesis
- Weakness
- Sleep disturbance
- Visual impairment
- Hearing impairment
- Hypertension
- Ischaemic heart disease
- Atrial fibrillation
- Heart valve disease
- Hypotension/syncope
- Heart failure
- Peripheral vascular disease
- Dyspnoea
- Respirator disease
- Peptic ulcer
- Faecal incontinence
- Weight loss & anorexia
- Urinary incontinence
- Urinary system disease
- Chronic kidney disease
- Osteoporosis
- Fragility fracture
- Arthritis
- Diabetes
- Thyroid disease
- Skin ulcer
- Anaemia & haematinic deficiency
- Falls
- Foot problems
- Housebound
- Problems with bathing
- Problems carrying out personal grooming and toileting
- Mobility and transfer problems
- Unable to manage medications
- Activity limitation
- Social vulnerability
- Environment problems
- Requirement for care
- Polypharmacy

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Language

- Frailty
- Healthy ageing
- Intrinsic capacity

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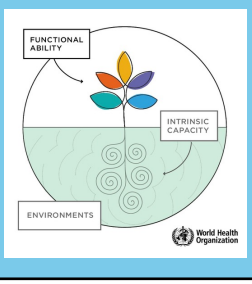
Frailty is:



- A loss of underlying physiologic reserve
- Reduction of intrinsic capacity
- Reduced resilience
- Vulnerability
- Reversible!

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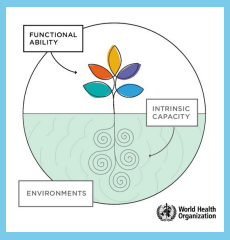
Intrinsic capacity is the sum of:



1. Locomotor- walking endurance and gait
2. Psychological-mood, exhaustion
3. Sensory – hearing, sight, taste
4. Cognitive- numbers, spatial awareness, learning, memory, executive function, language, concentration, social awareness
5. Vitality- grip strength, energy (Hb and 02)

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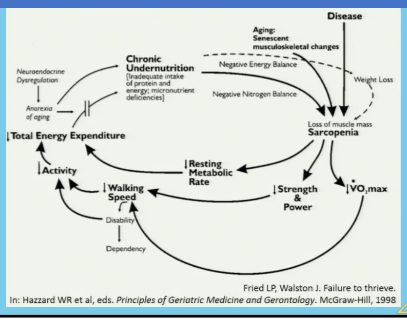
Our journey for the future!



Fried LP, Walston J. Failure to thrieve. In: Hazzard WR et al, eds. *Principles of Geriatric Medicine and Gerontology*. McGraw-Hill, 1998

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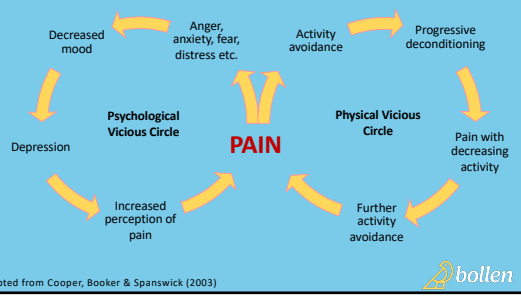
The Pain Cycle



Adapted from Cooper, Booker & Spanswick (2003)

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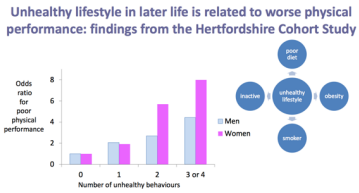
Who is at risk?



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Who is at risk aged 65+ in your practice?

- BMI > 30 or waist male >102 or women >88cm
- Psychosocial distress:
  - diagnosed mental illness
  - Taking a medication for mental health conditions
  - Isolated, lonely, grieving
  - Low SES
- Smokers
- Low levels of physical activity
- Diabetes Mellitus (T1, T2 and undefined :-))
- Identified as "high risk of hospital admission"….(CSIRO tool 30-100%)

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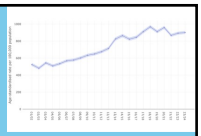
Frailty…….Why worry?



Clinical Syndrome of Frailty →	Frailty Outcomes
• Weakness	• Falls
• Fatigue	• Fractures
• Anorexia	• Geriatric Syndromes
• Weight loss	• Loss of Quality of Life
• Undernutrition	• Loss of Independence and Immobility
• Deconditioned	• Hospitalisation & its Complications
• Decreased muscle mass	• Residential Care Placement
• Balance and gait abnormalities	• Death

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Why recognize frailty?

- Fit → prevent the onset of frailty!
- Mild frailty → reverse it!
- Moderate → stabilize to prevent deterioration!
- Severe……?

The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty 2017

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Frailty Clinical Practice Guidelines

The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty

Recommendations:

- **Strong:**
  - Use a validated measurement tool to identify frailty
  - Prescribe physical activity with a resistance training component
  - Address polypharmacy
- Conditional
  - Screen for, and address, fatigue
  - Address weight loss with protein/calorie supplementation if appropriate
  - Prescribe Vitamin D if Vit D deficient

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What can be changed?

Potentially reversible areas:

- Weakness,
- Slowness,
- Low energy expenditure

Cameron, Kurrle et al 2015 → intervention reduced frailty and improved mobility BUT……


BMJ Open Effectiveness of a multifactorial intervention on preventing development of frailty in pre-frail older people: study protocol for a randomised controlled trial

Nicola Fairhall,[1] Susan E Kurrle,[2] Catherine Sherrington,[3] Stephen R Lord,[4] Keri Lockwood,[2] Beatrice John,[2] Noeline Monaghan,[1] Kirsten Howard,[1] Ian D Cameron[1]

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"We don't stop exercising because we get old, we get old because we stop exercising"
Dr Ken Cooper

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Identifying Frailty

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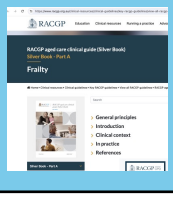
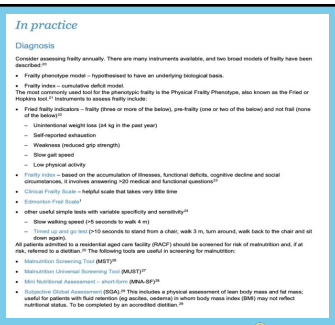
RACGP Silver Book Guidelines 2019





In practice

Diagnosis

Consider assessing frailty annually. There are many instruments available, and two broad models of frailty have been described.[24]

- Frailty phenotype model – hypothesised to have an underlying biological basis.
- Frailty index – cumulative deficit model.

The most commonly used tool for the phenotypic frailty is the Physical Frailty Phenotype, also known as the Fried or Hopkins tool.[17] Instruments to assess frailty include:

- Fried frailty indicators – frailty (three or more of the below), pre-frailty (one or two of the below) and not frail (none of the below)[17]
  - Unintentional weight loss (≥4 kg in the past year)
  - Self-reported exhaustion
  - Weakness (reduced grip strength)
  - Slow gait speed
  - Low physical activity
- Frailty index – based on the accumulation of illnesses, functional deficits, cognitive decline and social circumstances, it involves answering >20 medical and functional questions[17]
- Clinical Frailty Scale – helpful scale that takes very little time
- Edmonton Frail Scale[1]
- other useful simple tests with variable specificity and sensitivity[24]
  - Slow walking speed (>5 seconds to walk 4 m)
  - Timed up and go test (>10 seconds to stand from a chair, walk 3 m, turn around, walk back to the chair and sit down again).

All patients admitted to a residential aged care facility (RACF) should be screened for risk of malnutrition and, if at risk, referred to a dietitian.[25] The following tools are useful in screening for malnutrition:

- Malnutrition Screening Tool (MST)[26]
- Malnutrition Universal Screening Tool (MUST)[27]
- Mini Nutritional Assessment – short-form (MNA-SF)[28]
- Subjective Global Assessment (SGA).[29] This includes a physical assessment of lean body mass and fat mass; useful for patients with fluid retention (eg ascites, oedema) in whom body mass index (BMI) may not reflect nutritional status. To be completed by an accredited dietitian.[30]

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RACGP Red Book 10th edition 2024

Table of recommendations

Screening — Recommended as of: 28/06/2024

Recommendation	Grade	How often	References
Consider screening for frailty as part of an assessment of elderly patients (aged ≥75 years) using a validated rapid frailty instrument suitable to the specific setting or context (refer to Further information).	Practice point	Every 12 months.	1

Case finding — Recommended as of: 28/06/2024

Recommendation	Grade	How often	References
Consider screening for frailty as part of an assessment of patients (aged 65–74 and who have factors associated with frailty) using a validated rapid frailty instrument suitable to the specific setting or context (refer to Further information).	Practice point	Every 1–3 years.	2

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Preventive activities and advice — Recommended as of: 28/06/2024

Recommendation	Grade	How often	References
To slow or reverse the progression of frailty: • offer a multi-component progressive physical activity program, including resistance and aerobic exercise; consider early involvement of a physiotherapist or exercise physiologist if possible • encourage optimised nutrition • provide medication management • encourage enhanced social connectedness.	Practice point	N/A	2

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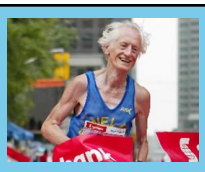
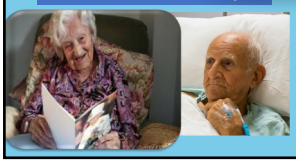


How to identify?



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What would be useful in a screening tool?

- Quick
- Easy to use
- Easy to understand for patient, doctor and nurse
- Could be used in waiting room or before visit
- Validated
- Can then act on it as the evidence is compelling
- The tool helps describe what is next required
- Adds value!

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Use the FRAIL scale

Fatigue-are you feeling fatigued? (yes 1 point)

Resistance- Difficulty walking a flight of stairs? (yes 1 point)

Ambulation- Difficulty walking around the block? (yes 1 point)

Illnesses- 5 or more chronic conditions? (yes 1 point)

Loss of weight of 5% or more over past 12 months? (yes 1 point)

If the older person scores 1- 2, they are pre-frail, 3+ indicates they are frail and would benefit with:

- physical activity
- **polypharmacy review**
- address fatigue
- protein/calorie supplementation
- vitamin D

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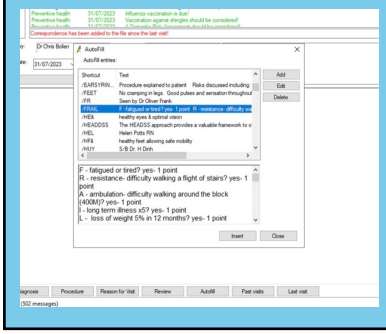

/FRAIL

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Assessing Sarcopenia

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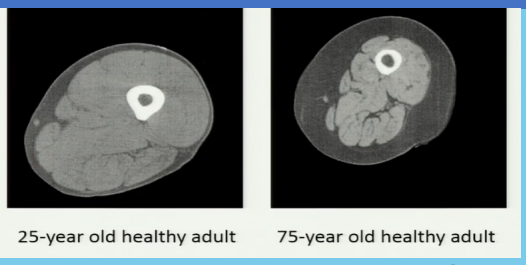
What Happens to Muscles as We Age?



25-year old healthy adult | 75-year old healthy adult

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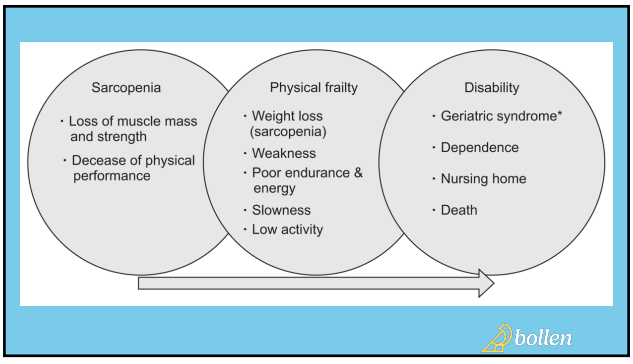

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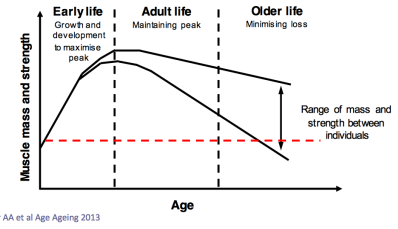
A lifecourse approach to skeletal muscle function



Sayer AA et al Age Ageing 2013

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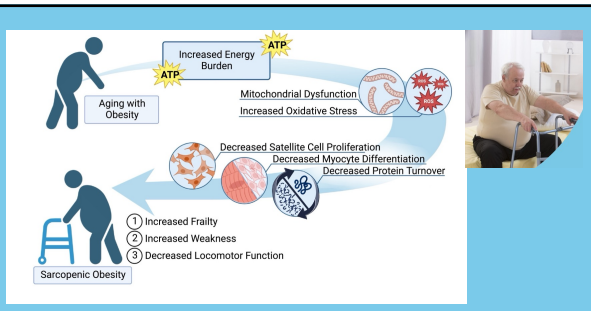

#Metabolism 2023 Christopher L. Axelrod, Wagner S. Dantas, John P. Kirwan

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The Health Benefits of Maintaining Muscle Health

- Focus on remaining independent and active: "What Matters"
- Enhanced Vitality and Energy + Resilience!
- Improved balance and mobility
- Better Bone Health
- Reducing the risk/impact of long term health conditions
- Link between muscle health and dementia prevention
- Post illness and hospital deconditioning

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What is a Muscle Health Check?

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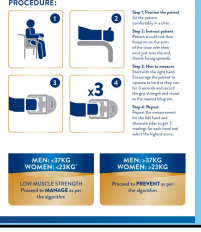
Part 1: Assessing strength

ASSESS → Handgrip Strength[3]

MATERIALS REQUIRED
- Handgrip dynamometer
- Chair with back rest and fixed arms

PROCEDURE:



MEN: ≤37KG WOMEN: ≤23KG	MEN: >37KG WOMEN: >23KG
LOW MUSCLE STRENGTH Proceed to **MANAGE** as per the algorithm	Proceed to **PREVENT** as per the algorithm

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Part 1: Assessing strength

ASSESS → 5 Times Sit-to-Stand[4]

MATERIALS REQUIRED
- Stopwatch
- Chair with back rest

PROCEDURE:

≥ 11 SECONDS*	<11 SECONDS
LOW MUSCLE STRENGTH & FUNCTION Proceed to **MANAGE** as per the algorithm	Proceed to **PREVENT** as per the algorithm

The 5 Time Sit-to-Stand Test

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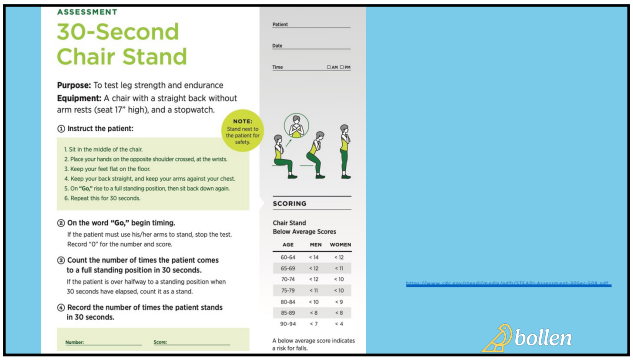
ASSESSMENT
30-Second Chair Stand
Purpose: To test leg strength and endurance
Equipment: A chair with a straight back without arm rests (seat 17" high), and a stopwatch.
① Instruct the patient:
1. Sit in the middle of the chair.
2. Place your hands on the opposite shoulder crossed, at the wrists.
3. Keep your feet flat on the floor.
4. Keep your back straight, and keep your arms against your chest.
5. On "Go," rise to a full standing position, then sit back down again.
6. Repeat this for 30 seconds.
NOTE: Stand next to the patient for safety.
② On the word "Go," begin timing.
If the patient must use his/her arms to stand, stop the test. Record "0" for the number and score.
③ Count the number of times the patient comes to a full standing position in 30 seconds.
If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand.
④ Record the number of times the patient stands in 30 seconds.
Number: Score:
Patient
Date
Time
SCORING
Chair Stand
Below Average Scores
AGE MEN WOMEN
60-64 < 14 < 12
65-69 < 12 < 11
70-74 < 12 < 10
75-79 < 11 < 10
80-84 < 10 < 9
85-89 < 8 < 8
90-94 < 7 < 4
A below average score indicates a risk for falls.
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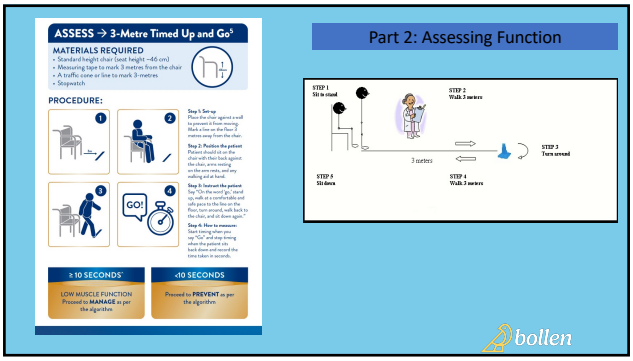
ASSESS → 3-Metre Timed Up and Go⁵
MATERIALS REQUIRED
• Standard height chair (seat height ~46 cm)
• Measuring tape to mark 3 metres from the chair
• A traffic cone or line to mark 3-metres
• Stopwatch
PROCEDURE:
GO!
≥ 10 SECONDS*
LOW MUSCLE FUNCTION
Proceed to MANAGE as per the algorithm
<10 SECONDS
Proceed to PREVENT as per the algorithm
Part 2: Assessing Function
STEP 1
Sit to stand
STEP 2
Walk 3 meters
STEP 3
Turn around
3 meters
STEP 4
Walk 3 meters
STEP 5
Sit down
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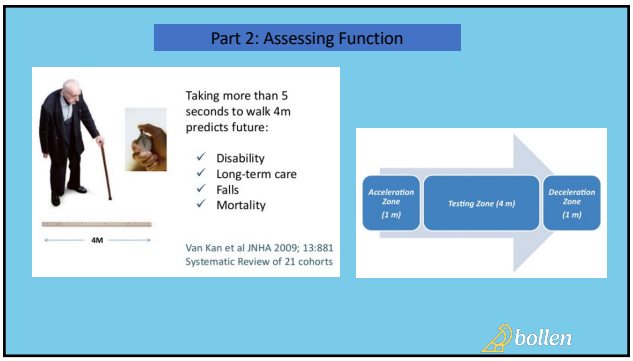
Part 2: Assessing Function
Taking more than 5 seconds to walk 4m predicts future:
✓ Disability
✓ Long-term care
✓ Falls
✓ Mortality
4M
Van Kan et al JNHA 2009; 13:881
Systematic Review of 21 cohorts
Acceleration Zone (1 m)
Testing Zone (4 m)
Deceleration Zone (1 m)
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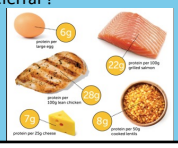
What happens after a muscle health check?

- "What Matters?"
  - How's your motivation to do something new?
- Exercise prescription /plan-→ Referral ?
- Protein advice → Referral ?
- Review medications→ Referral ?



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Not just any exercise….!

Progressive **R**esistance **T**raining -2 x week
It is the key for improving muscle health.

"Frailty is not a barrier to exercise, but rather one of the most important reasons to prescribe it"

 # Mikel Izquierdo, Maria Fiatarone Singh, Ageing Research Reviews 2023

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Frailty Management - ↑ Protein

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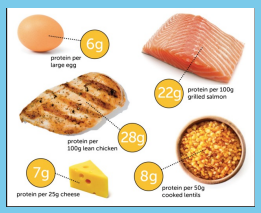
Muscle Health Management – How much Protein?



- 1.5 gram per KG bodyweight
- 75Kg person- 100g daily
- 25g per meal + snacks
- I cup milk = 8 g protein

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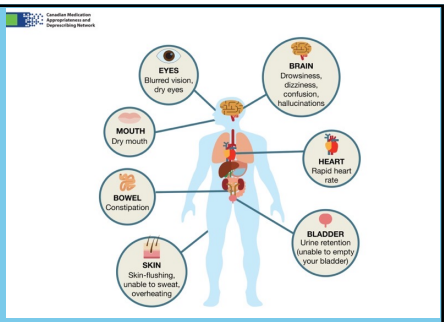
Medications: Cholinergic impact



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Social Prescribing and Healthy Ageing

'……is the practice where health professionals, have the resources and infrastructure to link patients with social services
– or even social groups in a bid to address the social determinants contributing to poor health and stave off the epidemic of loneliness and social isolation'
Consumers Health Forum of Australia

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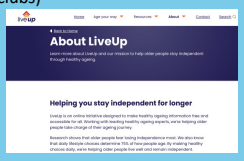
Social Prescribing & the Local Healthcare Neighbourhood

- Councils (social connections, friendship clubs)
- Health Pathways
- COTA Strength for Life
- Seniors Organisation in your area
- Parkrun, Walking Netball
- Community bus
- Community Gardens, Mens Shed
- Aqua Fitness, Dance and Music, yoga, pilates, tai chi, Zumba)
- Aged Care Volunteer Visitors scheme



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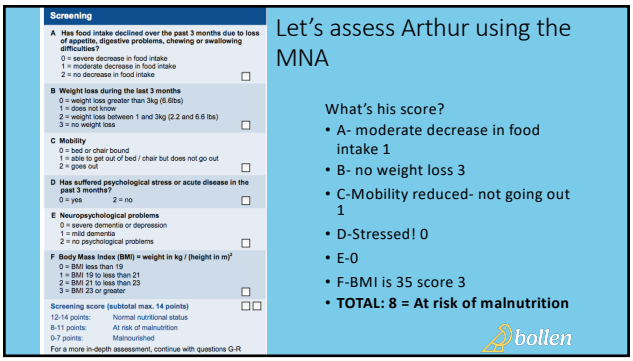

Let's assess Arthur using the MNA

What's his score?

- A- moderate decrease in food intake 1
- B- no weight loss 3
- C-Mobility reduced- not going out 1
- D-Stressed! 0
- E-0
- F-BMI is 35 score 3
- **TOTAL: 8 = At risk of malnutrition**

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Care Planning with impact for Arthur

Instead of	The plan should read
Need: Fall prevention Goal: Prevent A&E attendances Action: Attend physiotherapy appointments once per month	Need: I need to build up my muscle strength to assist with balance Goal: To be able to use the stairs without needing any assistance Actions: Doctor to refer me to a physiotherapist; I will discuss strengthening exercises with my physio; I will join a weekly walking group

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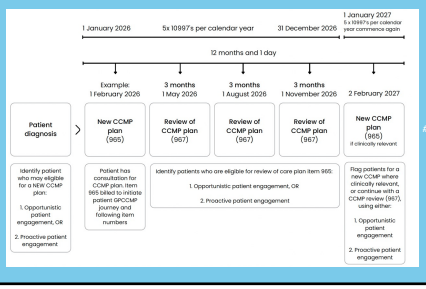
A cycle of care for older people



 # Cubiko, Hagen and Poyner

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Making a difference in Primary Care!

- Systems
- Engagement
- Well trained team
- Shared Purpose …."Making a difference"

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"You can't turn back the clock but you can wind it up"

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Summary and take-home messages

- Recognise frailty as a long term condition rather than responding "you are just getting old"
- Use a screening tool at every interaction with older people
- Referral for multi disciplinary team care can make a difference, **but only** if the older person sets goals
- Dignity in the care of older people is vital
- "You can't turn back the clock but you can wind it up"

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Remember the FRAIL scale

- **F**atigue-are you feeling fatigued? (yes 1 point)
- **R**esistance- Difficulty walking a flight of stairs? (yes 1 point)
- **A**mbulation- difficulty walking around the block? (yes 1 point)
- **I**llnesses- 5 or more chronic conditions? (yes 1 point)
- **L**oss of weight of 5% or more over past 12 months? (yes 1 point)

If the older person scores 1- 2, they are pre-frail, 3+ indicates they are frail and would benefit with:

- physical activity
- polypharmacy review
- address fatigue
- protein/calorie supplementation
- vitamin D

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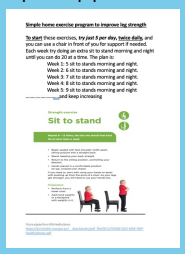
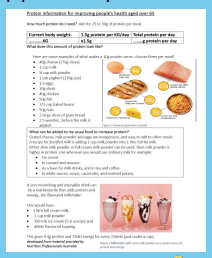
Simple approaches to support improvements





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HealthPathways

HealthPathways Western Sydney

HealthPathways offers primary care clinicians locally agreed, evidence-based information to make the right decisions, together with patients, at the point of care.

HealthPathways provides clear and concise guidance for assessing and managing a patient with a particular symptom or condition while preserving clinical autonomy and patient choice.

Content is developed collaboratively by general practitioners, hospital clinicians, and a wide range of other health professionals.

How to access HealthPathways

You must register for a personal account to access the Western Sydney HealthPathways site.

Benefits of a HealthPathways account:

- **Web-Based Access** – Easily use on a desktop, laptop, tablet, or phone.
- **Secure & Private** – Personal login with profile management and personalised features.
- **Access to multiple sites** – Access multiple HealthPathways sites with one login.
- **Exclusive Features** – Access exclusive features like AI-enhanced search & CPD reporting

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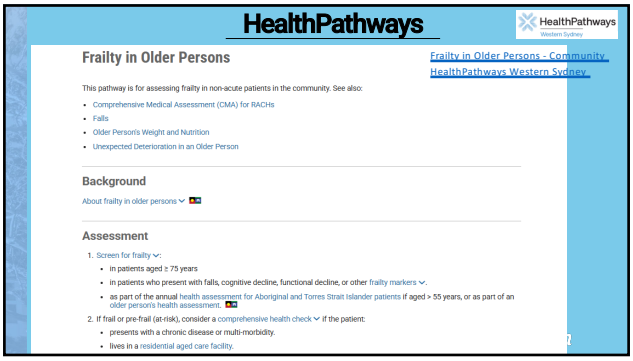
HealthPathways
HealthPathways
Western Sydney
Frailty in Older Persons
Frailty in Older Persons - Community HealthPathways Western Sydney
This pathway is for assessing frailty in non-acute patients in the community. See also:
Comprehensive Medical Assessment (CMA) for RACHs
Falls
Older Person's Weight and Nutrition
Unexpected Deterioration in an Older Person
Background
About frailty in older persons
Assessment
1. Screen for frailty:
in patients aged ≥ 75 years
in patients who present with falls, cognitive decline, functional decline, or other frailty markers.
as part of the annual health assessment for Aboriginal and Torres Strait Islander patients if aged > 55 years, or as part of an older person's health assessment.
2. If frail or pre-frail (at-risk), consider a comprehensive health check if the patient:
presents with a chronic disease or multi-morbidity.
lives in a residential aged care facility.

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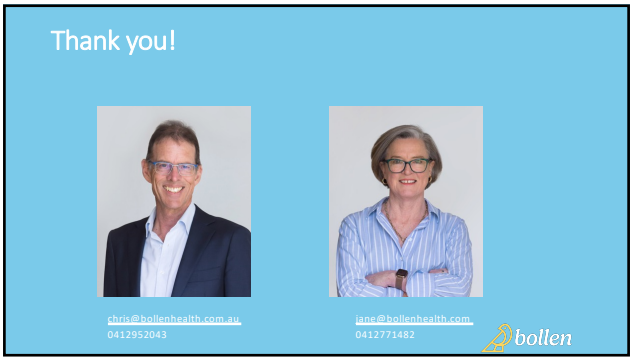
Thank you!
chris@bollenhealth.com.au
0412952043
jane@bollenhealth.com
0412771482
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