Morning tea

05

How to promote resilience in ageing by recognising frailty

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THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

How to promote resilience in ageing by recognising frailty

Selwyn Foundation Gerontology Conference
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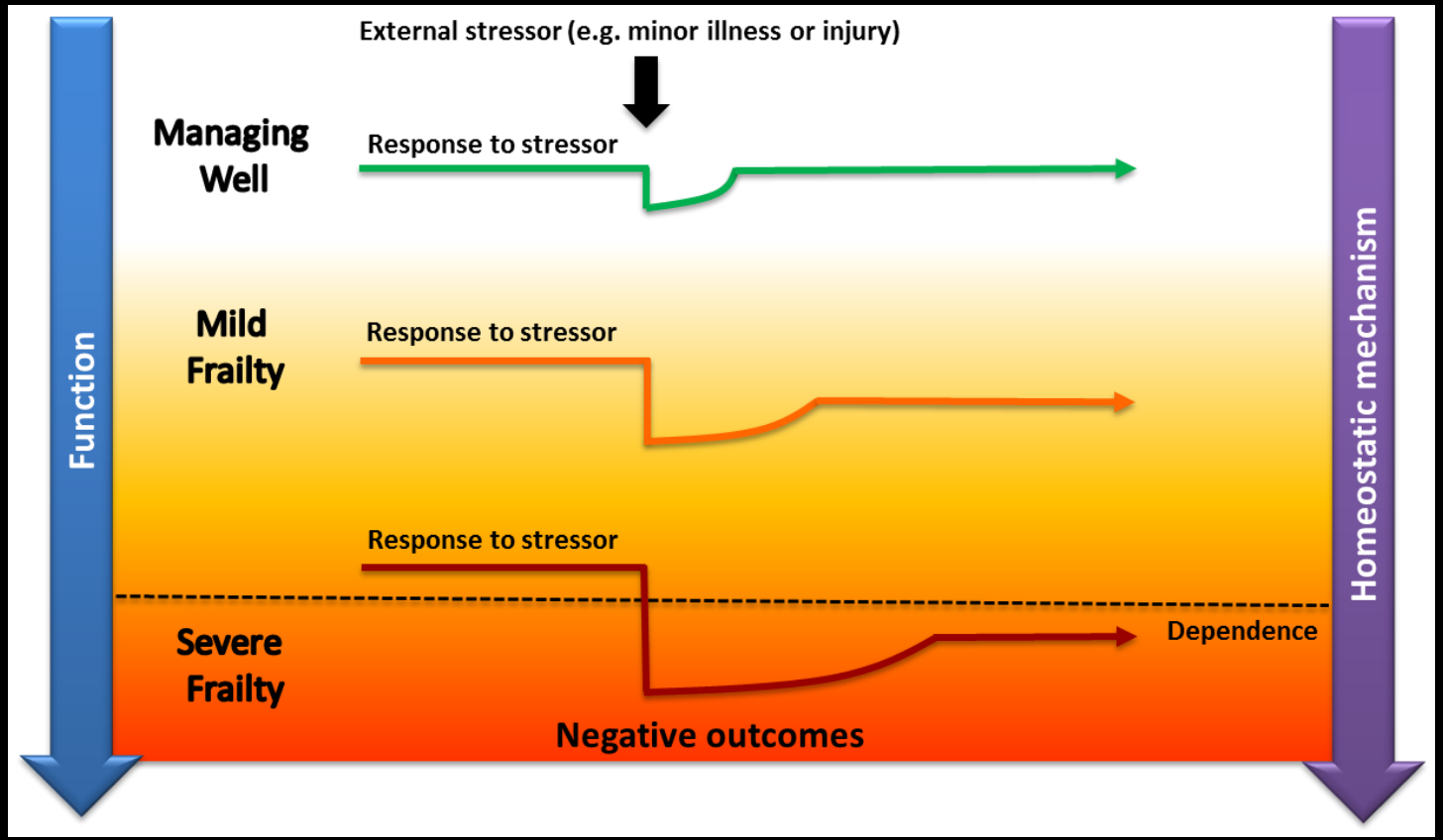
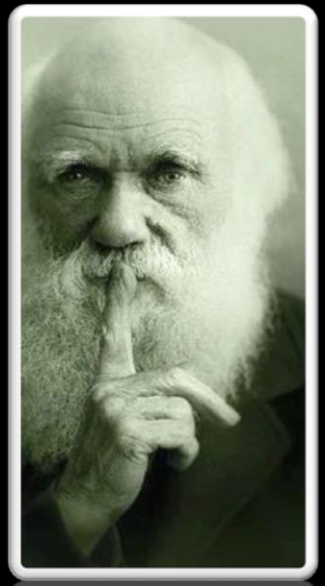
Dr Michal Boyd
Associate Professor and Nurse Practitioner

Being Mortal

- *"Our reverence for independence takes no account of the reality of what happens in life: sooner or later, independence will become impossible. Serious illness or infirmity will strike. It is as inevitable as sunset."*
  - *Atul Gawande*


External stressor (e.g. minor illness or injury)
Managing Well
Response to stressor
Mild Frailty
Response to stressor
Response to stressor
Severe Frailty
Dependence
Negative outcomes
Function
Homeostatic mechanism

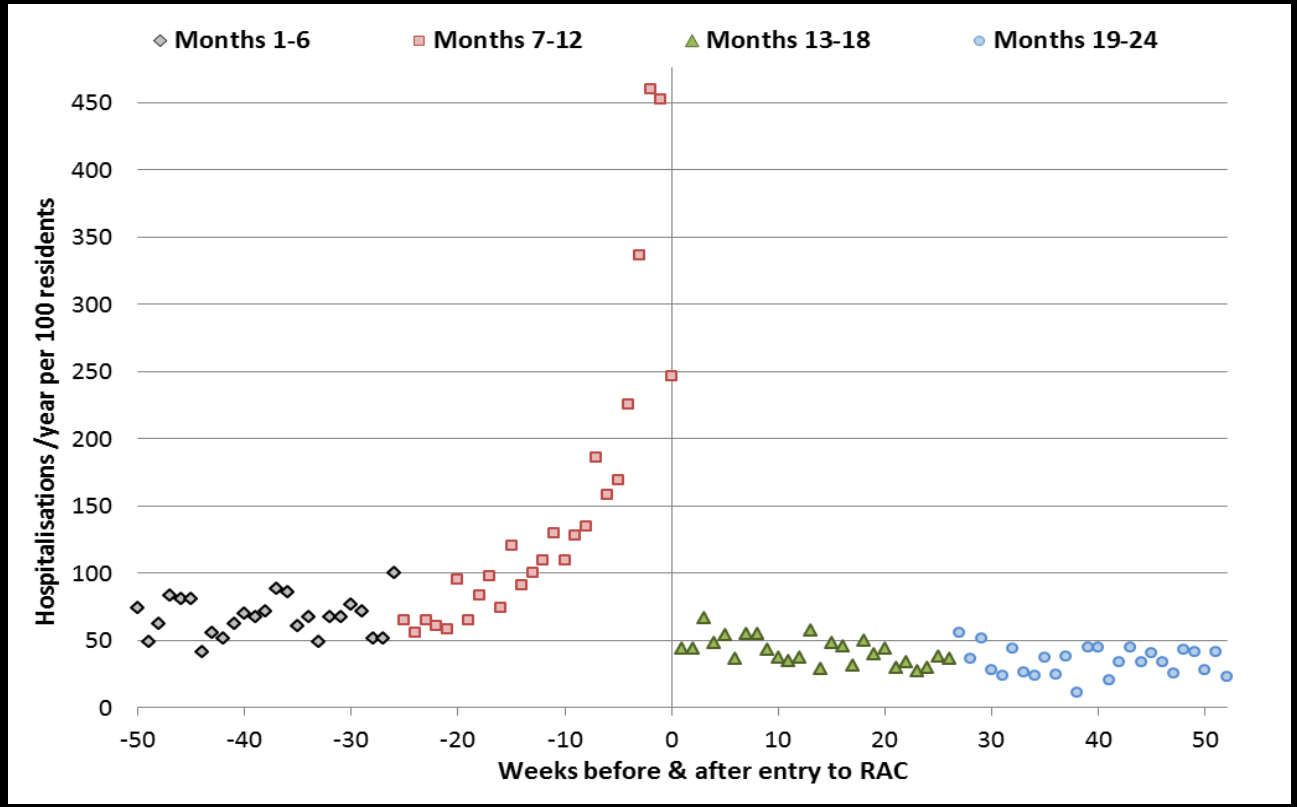


It is not the strongest of the species that survives, nor the most intelligent that survives.

It is the one that is the most adaptable to change.

Adaptation of Charles Darwin's theory 'Origin of Species'

Hospitalisation Before and After Residential Age Care Admission



Boyd M, et al. Age Ageing. 2016;45(4):558-63.

Rockwood: Clinical Frailty Score

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house.** Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

Rockwood: Clinical Frailty Score (cont)

7 Severely Frail – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail**.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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Defining and recognising frailty

Rockwood - Accumulation of Deficits Model, based on functional characteristics as depicted in the Clinical Frailty Scale below

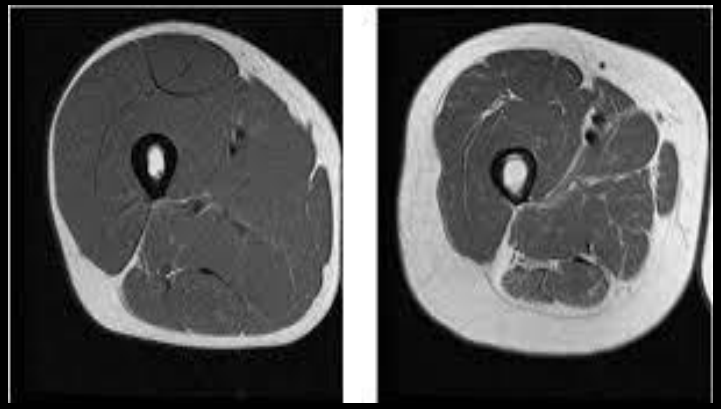
Example 1 - *Rockwood Frailty Index:* Below is an example of how to determine a frailty index (FI). Total items assessed (e.g. 26 below) divided by total number of deficits the person has.

0-5 deficits – 0/26 to 5/26 = 0.0 to 0.19: Frailty Index classification *Non-frail*
6-7 deficits – 6/26 to 7/26 = 0.23 to 0.27: Frailty Index classification *Pre-frail*
> 8 deficits – 8/26 or more = 0.31 or higher: Frailty Index classification *Frail*

Rockwood 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

Fried: Frailty Risk Factors



Age 25 Age 63

Sarcopenia

Frailty is defined as 3 or 5 Components (Fried 2001):

- unintentional weight Loss
- slow walking speed
- self-reported exhaustion
- low energy expenditure
- weakness

Espinoza and Fried, 2007, Clinical Geriatrics,15(6).

Frailty Risk Factors

Physiologic

A. Activated inflammation

B. Immune system dysfunction

C. Anaemia

D. Endocrine system alteration

E. Underweight or overweight

F. Age

Sociodemographic and Psychological

A. Female gender

B. Low socioeconomic status

C. Race/ethnicity

D. Depression

Medical Illness &/or Comorbidity

A. Cardiovascular disease

B. Diabetes

C. Stroke

D. Arthritis

E. Chronic obstructive pulmonary disease

F. Cognitive impairment/cerebral changes

Disability

A. Activity of daily living disability

Espinoza and Fried, 2007, Clinical Geriatrics,15(6).

FRAIL-NH

	0	1	2
Fatigue	No	Yes	PHQ-9 ≥10
Resistance	Independent Transfer	Set Up	Physical Help
Ambulation	Independent	Walker	Not Able/WC
Incontinence	None	Bladder	Bowel
Loss of Weight	None	yes	xxxx
Nutritional Approach	Regular Diet	Mechanically Altered	Feeding Tube
Help with Dressing	Independent	Set Up	Physical Help
Total			0-13

Nonfrail (0-5), Prefrail (6-7), Frail (≥8)

Kaehr E, Visvanathan R, Malmstrom TK, Morley JE. Frailty in Nursing Homes: The FRAIL-NH Scale. *J Am Med Dir Assoc* 2015;16(2):87.

Geriatric Syndromes

"Geriatric Syndromes are multifactorial health conditions that occur when the accumulated effects of impairments in multiple systems renders a personal vulnerable"

Tinetti, Williams and Gill; Dizziness among Older Adults: A Possible Geriatric Syndrome; Ann Intern Med. 2000;132:337 – 344.

Geri-Syndrome

- Multi-factorial
- Intimate association with functional impairment and decline
- Increased association with mortality and morbidity

Geriatric Syndromes

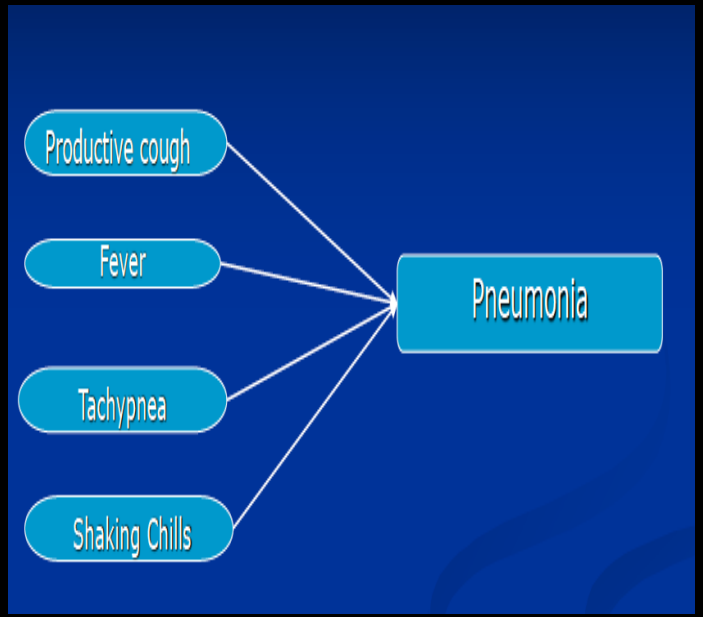
- Dementia
- Delirium
- Urinary Incontinence
- Falls
- Gait disturbance
- Dizziness
- Syncope
- Hearing impairment
- Visual impairment
- Osteopenia
- Malnutrition
- Eating and feeding problems
- Pressure ulcers
- Sleep problems

’Other’ Geriatric Syndromes

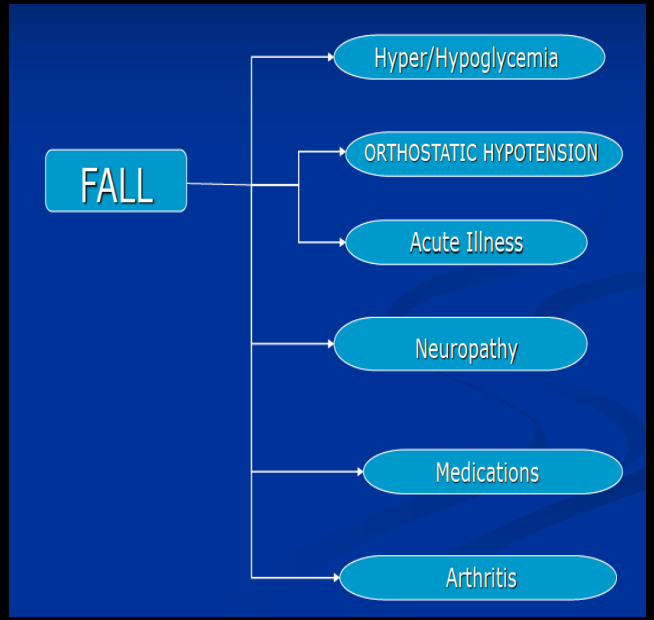
- Polypharmacy
- Self-neglect
- Elder Abuse
- Frailty
- Dehydration and Electrolyte Imbalance
- Constipation

Differential Diagnoses

- Traditional



- Geriatric Syndrome



Components of Comprehensive Geriatric Assessment – *'Geriatric Giants'*

- Functional Capacity
- Falls Risk
- Cognition
- Mood
- Polypharmacy
- Social Support/Living Situation
- Sleep
- Advanced Care Plans
- Nutrition/Weight Change
- Urinary Continence
- Intimacy & Sexual function
- Vision/hearing
- Nutrition/Weight loss/Dentition
- Spirituality
- ETOH and Cigarette use
- Financial Concerns

Comprehensive Geriatric Assessment

Increasing complexity in any of these areas

increase the older adult's risk for illness, new disease, progressive disability, and death.

Frailty Care Guides 2018

NZ Health Quality and Safety Commission

Frailty
Acute Deterioration
Gradual Deterioration
Last days of life
Advanced Care Planning
Enduring power of attorney
Capacity
Communication with Families
Deprescribing and polypharmacy, Crushing
Cardiac
Constipation & gastrointestinal
Delirium
Dementia
Depression

Behaviours that challenge
Diabetes
Falls Prevention includes post falls assessment
Fractures and contractures
Nutrition and hydration
Pain
Respiratory Stepwise management of stable COPD
Skin
Syncope and collapse
Sexuality and Intimacy
Urinary incontinence
UTIs

Acute Deterioration Assessment Steps

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

STOP and WATCH	
S	Seems different than usual
T	Talks or communicates less
O	Overall needs more help
P	Participates less in activities
A	Ate less, difficulty swallowing medications
N	No bowel motion >3 days, diarrhoea
D	Drank less
W	Weigh change
A	Agitated or nervous more than usual
T	Tired, weak, confused or drowsy
C	Change in skin colour or condition
H	More help walking, transferring, toileting

Assessment Step 1:

- Review goals of care for hospitalisation, antibiotics or for comfort cares only, CPR status?
- What does the resident/family want to happen now?
- If comfort care only see Palliative Care Guides.

Assessment Step 2: ***Take observations – review warning signs that indicate serious illness or sepsis (see pg XX for sepsis screening tool)*** **Take into account baseline observations**

- **Respiratory rate >28/minute (see respiratory CG pg XX) Increased respiratory rate is one of the most sensitive indicators of acute illness.** SPO2 <90%
- Temperature >37.7 (or low temp <36)
- New heart rate >100 bpm
- New systolic BP <100 mmHg

Assessment Step 3:

Consider need for labs: CBC, CRP, electrolytes, Creatinine, LFTs, MSU, BGL

Assessment Step 4:

- Start input/output chart, ensure input/output equal in 24 hours
- Offer fluids orally every 1-2 hours to increase oral fluid intake to 1000-1500/24 hours
- **If unable to take oral fluids, consider normal saline SC (500 ml/12 hrs) & review diuretics (in consultation with prescriber)**

Assessment Step 5: **Delirium screen: Neuro changes, increased falls, functional change and/or confusion.** Neuro assessment: pupils, extremity, power, face and body symmetry, weakness. See Delirium CG and 4AT delirium screen

Assessment Step 6: ***Review pain status,*** Assess for pain location, type and severity. Review for pain intervention (use OLDCART pg XX)

Assessment Step 7: ***onstipation or diarrhoea.*** Bowels not open for 3 days or watery bowels? Review available laxatives and clear bowels for constipation. Use loperamide and assess for dehydration for diarrhoea. (See Care guide pg XX)

Final recap assessment step: What does the resident/family want to happen now?

- Review again after assessment goals of care:
  - for hospitalisation?, Antibiotics?
  - for comfort cares only? If comfort care only see Palliative care guide (pg XX)

Acute deterioration – Clinical Reasoning Guide

Start with the STOP AND WATCH, and then complete reversibility assessment steps 1-7 including Assessment handover tool (page xx).
Below is a tool to help narrow down the clinical causes for acute deterioration and helpful Frailty Care Guides could help.

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 medical history, and medications are they on? Any recent labs, investigations, new medications?
Below are possible causes for specific clinical changes.

Dizziness

- Neurological changes/CVA – pg xx
- Benign Positional Vertigo – pg. XX
- Cardiac changes – pg xx
- Dehydration – pg XX

Confusion, change in behaviour

- Delirium – pg. xx
- Stroke - pg xx
- Uncontrolled Diabetes – pg xx
- Electrolytes imbalance – pg xx
- Depression – pg xx

Urinary Dysuria, flank pain, lower abdominal pain

- Urinary Tract infection pg xx
- Urinary Retention pg xx
- Constipation
- Pylonephritis (kidney infections) pg xx
- Medications pg xx

Sleepiness, fatigue, drop in consciousness level

- Hypoxia pg xx
- BGL too low/too high pg xx
- Hypoactive delirium pg xx
- Medications pg xx
- Electrolyte imbalance
- Dehydration
- Infection
- Acute cardiac event or congestive heart failure pg xx
- Neurological change: CVA/TIA pg xx

Fall

- Cardiac changes – pg xx
- Dehydration – pg xx
- Urinary tract infection – pg xx
- Lower respiratory tract infection – pg xx
- Neurological event – eg TIA or CVA pg XX
- Increasing frailty – pg. xx
- Medication changes – pg xx

Skin changes Rash or wound

- Infection – cellulitis? Pg XX
- DVT? – pg XX
- Allergic/reaction pg xx
- Bleeding (on warfarin?) pg xx

Shortness of breath (SOB)

- Respiratory: COPD or lower respiratory tract infection – pg XX
- Acute cardiac event or congestive heart failure pg xx
- Anaemia pg

Pain

- Complete OLDCART (see below)
- Chest pain, see pg xx
- Neurologic, see pg Xx
- Musculoskeletal, see pg xx
- Abdominal, see pg xx
- Peripheral neuropathic pain, see pg xx

OLDCART

Symptom evaluation tool

- **O** Onset
- **L** Location
- **D** Duration
- **C** Character
- **A** Aggravation or associated symptoms
- **R** Relievers
- **T** Treatment

Sepsis Screening Tool
Sepsis is a medical emergency

- Known or suspected infection

Plus

- Any 2 of the following
~ Acute mental status change
~ Hyperglycaemia
~ Hyperthermia or hypothermia <36 or > 38.5
~ High white blood cell count (or low blood cell count)
~ Tachycardia HR>100
~ Tachypnoea >28 respiration/minute

May indicate sepsis – Contact GP/NP

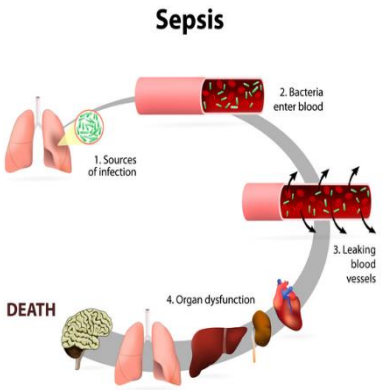
Possible shock

Indications of **septic shock** or organ dysfunction include:
- Hypotension
- Increasing oxygen requirement (SPO2 >90%)
- Petechial rash
- Elevated creatinine or bilirubin level
- Low platelet count

Review again goals of care – for hospital or comfort measures?

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



Name:

NHI:

Early Alert Assessment and Communication

- ☐ **Review Resident Record:** Recent progress notes, labs, medications, other orders
- ☐ **Assess the Resident:** using this form
- ☐ **Review / activate care pathway (if available)**
- ☐ **Have Relevant Information Available when Reporting**

(i.e. medical letters, blood tests and investigations, ceiling of intervention orders, allergies, medication list)

Situation

Staff Name and designation: _____

Signature_____
Date ____ / ____ / ____ Time (am/pm)_____

The current change in condition, symptoms and concerns are

This started on _____ / _____ / _____ at _____ am/pm

Since this started it has gotten: ☐ worse ☐ better ☐ stayed the same

Things that make the problem ***worse*** are_____
Things that make the problem ***better*** are_____

This condition, symptom, or sign has occurred before: ☐ Yes ☐ No
Treatment for last episode:

Other relevant information or problems:

Background

Resident Description
This resident is in the facility for: ❑ Rest Home ❑ Hospital ❑ Dementia ❑ Other _____
Primary diagnoses:

Relevant medical/social history:

Allergies / alerts:

Medications
Currently on:
❑ Warfarin: last INR: _____ Date ___/___/___ ❑ other anticoagulant ❑ oral hypoglycaemic ❑ Insulin ❑ Digoxin
❑ Other:
❑ Medication changes in the last week:

Resident and/or family advanced care planning / preferences for care:

Assessment

Blood Pressure: Lying: Standing: Blood Sugar:
Pulse: ❑ Regular ❑ Irregular Temperature:
General appearance: Respiratory rate:
Pulse Oximetry: % on ❑ Room Air ❑ O2 ____ l/min

Weight: _____ kg on ____/____/____
For CHF, oedema, or weight loss: last weight before the current one was_____kg on ____/____/____

Changes since last set of observations:

COGNITIVE	RESPIRATORY	ABDOMINAL	PAIN	MSK
❑ disorientation ❑ confusion ❑ fluctuating ❑ consistent ❑ other signs of delirium (CAM) ❑ baseline MOCA: ❑ altered level of consciousness ❑ hyper alert ❑ sleepy/lethargic ❑ difficult to rouse ❑ unresponsive **NEUROLOGICAL** ❑ headache ❑ dizziness ❑ numbness / tingling ❑ seizure ❑ Face droop Arm / body weakness Speech changes ❑ GCS score:	❑ shortness of breath ❑ new ❑ increased ❑ at rest ❑ on exertion ❑ SOB affecting speech or sleep ❑ cough ❑ productive ❑ non-productive ❑ laboured ❑ rapid ❑ cheyne stoke ❑ wheeze ❑ crackles **CVS** ❑ chest tightness ❑ pain ❑ dizzy / lightheaded ❑ oedema ❑ irregular pulse ❑ resting pulse >100 or <50 ❑ JVP <3cm	❑ tenderness ❑ pain ❑ decreased food / fluid ❑ swallowing difficulty ❑ nausea ❑ vomiting ❑ constipation date of last BM: ❑ diarrhoea ❑ bowel sounds ❑ absent ❑ hyperactive ❑ bloody stool or vomit ❑ distended abdomen ❑ jaundice **GU** ❑ tenderness ❑ pain ❑ painful urination ❑ urgency ❑ frequency ❑ nocte increase ❑ decreased or no urine ❑ incontinence ❑ blood	❑ yes ❑ new or ❑ increased ❑ OLDCART assessment ❑ intensity 1-10: ❑ non-verbal signs: **BEHAVIOURAL** ❑ depressed ❑ social withdrawal ❑ aggression ❑ verbal ❑ physical ❑ personality change ❑ other:	❑ decreased mobility ❑ increased weakness ❑ needing more assistance with ADL ❑ falls in last month: ❑ symptoms of fracture Site: **SKIN** ❑ discolouration ❑ itch / rash ❑ contusion ❑ open wound Site: ❑ pressure injury Site: Grade: ❑ chronic wound Type: Site:

Recommendation / Response

Nursing Diagnosis (what do you think is going on?):

Nursing Interventions (what are you going to do):
❑ observations _____ hrly for ____ hrs ❑ urinalysis ❑ activate symptom management plan:
❑ safety interventions _____ ❑ additional assessment _____ ❑ review recent bloods
❑ prn medications: _____ ❑ increase oral fluids ❑ family discussion, place of care / goals of care
❑ other:

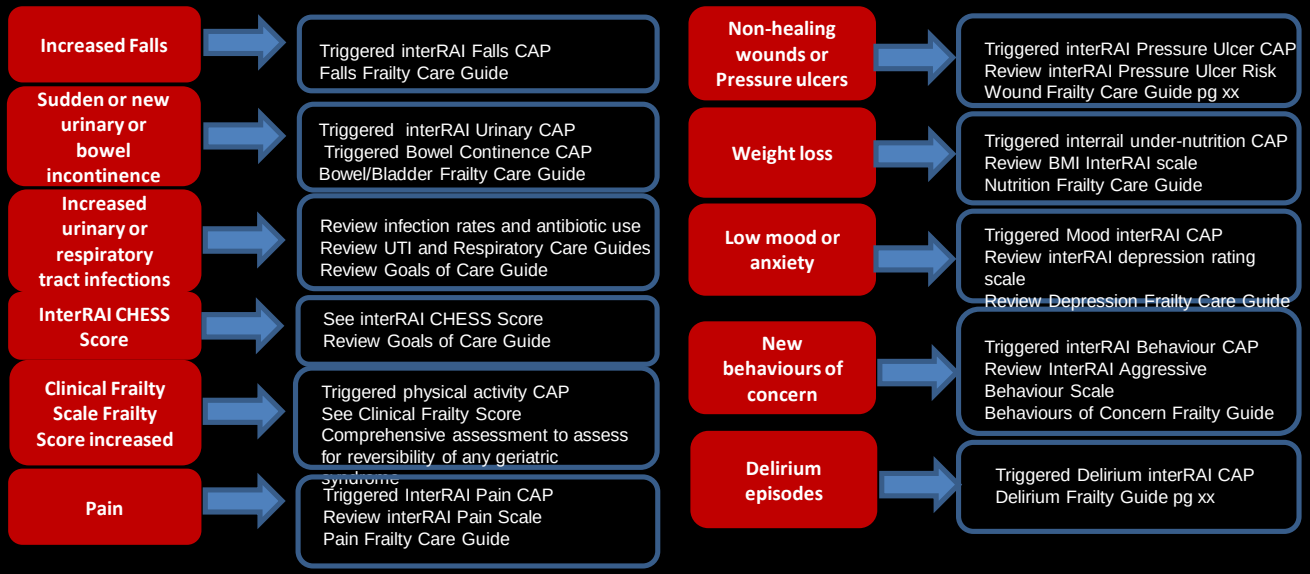
GP Notified:_____ Date ____ / ____ / ____ Time (am/pm)_____

Recommendations / plan from GP:
❑ ongoing monitoring every _____ hrs and GP review in _____
❑ IV or subcutaneous fluids: ❑ Oxygen: ❑Other:
❑ New or change medication(s):
❑ Transfer to the hospital (non-emergency / emergency) *(send a copy of this form)*
Goals of transfer:

Name of Family Notified:_____
Date ____ / ____ / ____ Time (am/pm)_____

Gradual Deterioration

Red Flags for Gradual deterioration at 6 month assessment and care planning prompts



InterRAI CHESS

Medical complexity and health instability scores range from 0 to 5.

Items:

- Vomiting
- Dehydration
- leaving food uneaten
- weight loss
- shortness of breath
- oedema
- end-stage disease
- decline in cognition and ADL

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

New Zealand InterRAI CHESS Scores

0 - No symptoms	1 - Minimal health instability	2 - Low health instability	3 - Moderate health instability	4 - High health instability	5 - Highest level of instability

Figure 23: Home Care assessments – CHESS scores

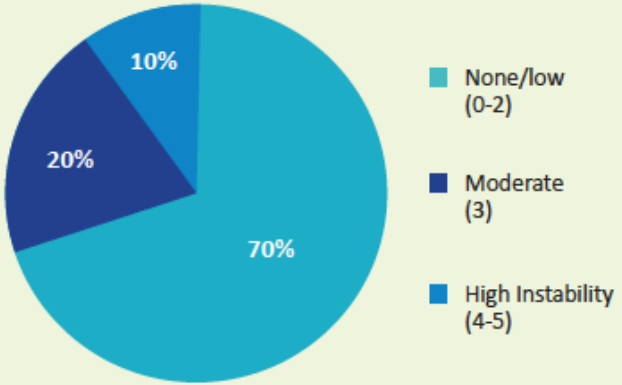
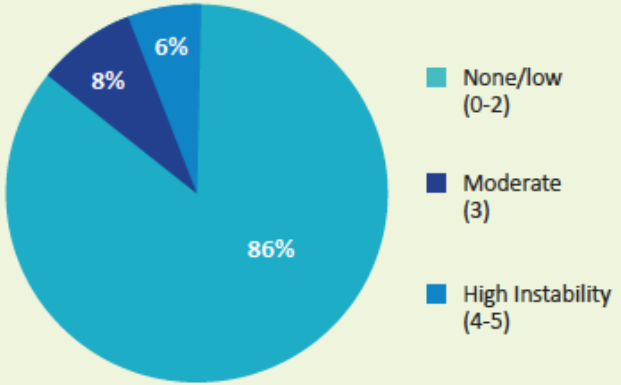


Figure 24: LTCF assessments – CHESS scores



Source: National interRAI Software Service New Zealand, data 2014/15.

Functional Status

Activities of Daily Living: ADLs

- Bathing
- Dressing
- Toileting
- Transfer
- Continence
- Feeding

Independent

Assistance

Dependent

Instrumental Activities of Daily Living: IADLs

- Telephone
- Traveling
- Shopping
- Preparing meals
- Housework
- Repairs
- Laundry
- Medication
- Money
- Computer

InterRAI ADL Subscales

ADL Hierarchy Scale 0–6

- Higher scores indicate greater decline (progressive loss) in ADL performance.

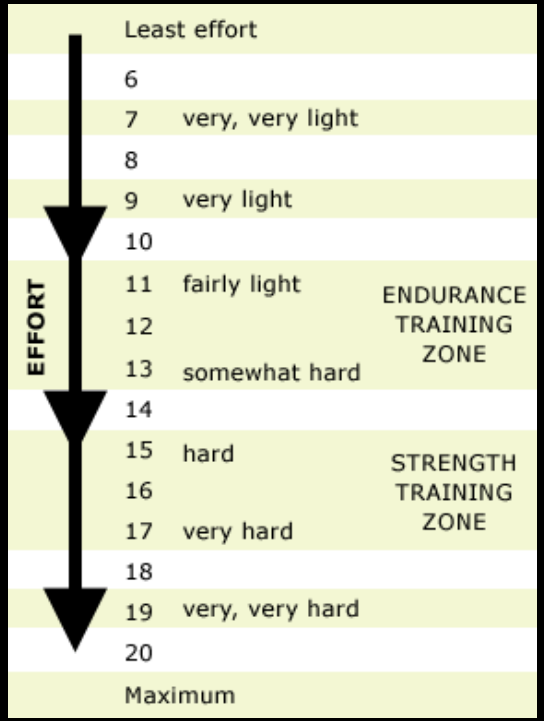
ADL Long Form 0–28

- More sensitive to clinical changes than the other ADL scales.
- Higher scores indicate more impairment of self-sufficiency in ADL performance

Falls

- Individualised Approach
- Vitamin D
- Geriatric Giants – it is a syndrome

Resistance Exercise



Rate of Perceived Exertion

1. Strength Training at least three times a week (Unless CVD risk)
2. Increasing resistance using the RPE scale.
3. Giving paracetamol before the exercise for those with joint or muscle pain can improve outcomes.

Drugs and falls

- Elderly have less efficient homeostatic mechanisms
- Increased postural hypotension with:
  - Antihypertensives and alpha blockers
  - TCAs
  - Benzodiazepines
  - Nitrates
  - Diuretics

Loneliness in New Zealand

Jamison et al. 2018, InterRAI HC 2012-2016 (n=71,859)

Feeling of loneliness in older adults aged 65+

European*	Lonely	Not lonely	Total
Living arrangement: Alone	15%	37%	52%
Living arrangement: With others	6%	42%	48%
Total	21%	79%	100%

Feeling of loneliness in older adults aged 65+

Māori	Lonely	Not lonely	Total
Living arrangement: Alone	10%	28%	38%
Living arrangement: With others	11%	51%	62%
Total	21%	79%	100%

Feeling of loneliness in older adults aged 65+

Asian	Lonely	Not lonely	Total
Living arrangement: Alone	7%	11%	18%
Living arrangement: With others	16%	66%	82%
Total	23%	79%	100%

Feeling of loneliness in older adults aged 65+

Pasifika	Lonely	Not lonely	Total
Living arrangement: Alone	4%	12%	16%
Living arrangement: With others	13%	71%	84%
Total	17%	83%	100%

Assessment of Social Support – Social Relationships Scale

In the past month, please rate how often…

Emotional Support

1. I have someone who understands my problems
2. I have someone who will listen to me when I need to talk
3. I feel there are people I can talk to if I am upset
4. I have someone to talk with when I have a bad day
5. I have someone I trust to talk with about my problems
6. I have someone I trust to talk with about my feelings
7. I can get helpful advice from others when dealing with a problem
8. I have someone to turn to for suggestions about how to deal with a problem

Cyranowski JM, Zill N, Bode R, Butt Z, Kelly MA, Pilkonis PA, et al. Assessing social support, companionship, and distress: National Institute of Health (NIH) Toolbox Adult Social Relationship Scales. Health Psychol. 2013;32(3):293-301.

Social Relationships Scale

Friendship

1. I get invited to go out and do things with other people
2. I have friends I get together with to relax
3. There are people around with whom to have fun
4. I can find a friend when I need one
5. I feel like I have lots of friends
6. I have friends who will have lunch with me when I want
7. I feel close to my friends
8. I feel like I'm part of a group of friends

Loneliness

1. I feel alone and apart from others
2. I feel left out
3. I feel that I am no longer close to anyone
4. I feel alone
5. I feel lonely

Cyranowski JM, Zill N, Bode R, Butt Z, Kelly MA, Pilkonis PA, et al. Assessing social support, companionship, and distress: National Institute of Health (NIH) Toolbox Adult Social Relationship Scales. Health Psychol. 2013;32(3):293-301.

	Delirium	Dementia	Depression	Psychosis
Onset	Acute	Insidious	Variable	Slow
Duration	Short	Lengthy	Variable recurrent	Variable recurrent
Course	Fluctuating	Progressive	Variable	Variable
Consciousness	Clouded	Clear (until later)	Mostly unimpaired	Unimpaired
Attention	Poor	Preserved (early)	Poor	Poor
Cognition	Impaired	Impaired	Variable	Normal

	Delirium	Dementia	Depression	Psychosis
Hallucinations	Common visual	Infrequent	Rare	Common
Delusions	Unstructured	Uncommon	Paranoid (occasionally)	Maintained
Orientation	Poor	Poor	Usually good	Good
Short term memory	Reduced	Reduced	Normal	Normal
Speech	Incoherent	Dysphasia	Normal	Normal
Psychomotor behavior	Lethargic/agitated	Normal	Variable	Variable
Physical illness	Present	Absent	Absent	Usually absent

Depression Rating Scale

- **0–14**
- A score of 3 or more may indicate a potential or actual problem with depression
  - Made negative statements
  - Persistent anger with self or others
  - Expressions, including non-verbal, of what appear to be unrealistic fears
  - Repetitive health complaints
  - Repetitive anxious complaints/concerns
  - Sad, pained or worried facial expressions
  - Crying, tearfulness

Treating Depression: Non-pharmacology approaches

- Exercise
- Decreased social isolation

Positive effect for those with dementia & mild cognitive impairment (Ortega et al. 2014)

- Cognitive/behavioural therapy, relaxation training, psychodynamic, supportive or counseling therapies, some multimodal (e.g., tai chi + CBT)

- Positive effects
  - On depression
  - Clinician rated anxiety but not self rated or carer rated anxiety

- No effects on other outcomes (e.g., QoL, activities of daily living, neuropsych Sx)

Depression Medication in Older People

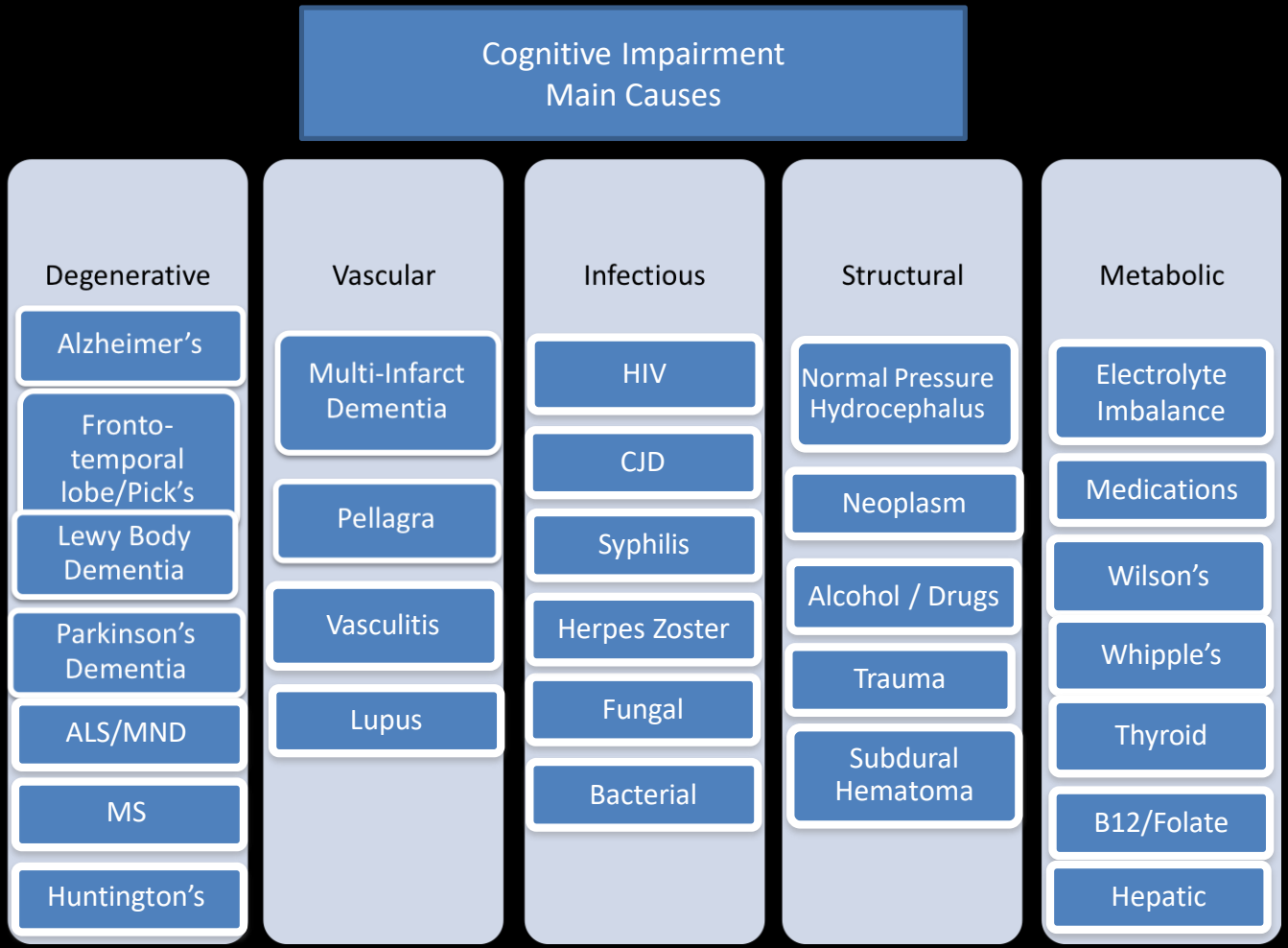
Types:

- SSRI (citalopram, fluoxetine)
- Atypicals (mirtazapine)
- SNRI (venlafaxine)
- Tricyclic Antidepressants (nortriptyline)

All have potential side effects:

- Falls
- Hyponatraemia
- QTc interval prolongation

Thakur et al., 2008; Snowden et al., 2003, Blake et al., 2009


Cognitive Impairment
Main Causes
Degenerative
Alzheimer's
Fronto-temporal lobe/Pick's
Lewy Body Dementia
Parkinson's Dementia
ALS/MND
MS
Huntington's
Vascular
Multi-Infarct Dementia
Pellagra
Vasculitis
Lupus
Infectious
HIV
CJD
Syphilis
Herpes Zoster
Fungal
Bacterial
Structural
Normal Pressure Hydrocephalus
Neoplasm
Alcohol / Drugs
Trauma
Subdural Hematoma
Metabolic
Electrolyte Imbalance
Medications
Wilson's
Whipple's
Thyroid
B12/Folate
Hepatic

Cognitive Performance Scale (CPS)

- Cognitive Skills for Daily Decision-Making (C1)
- Short-term memory OK (C2a)
- Making Self Understood (D1)
- Eating (G1jA)

- **0–6**
- Higher scores indicate more severe cognitive impairment

Lewy Body and Parkinson's Disease Dementia

LBD

- Cognitive Impairment
- Parkinson's Dx occurs around the same time or after dementia dx
- Fluctuating Cognition
- Visual Hallucinations
- Varying alertness and attention
- Delusions
- Unexplained syncope
- Rapid eye movement sleep disorder
- Neuroleptic sensitivity
- Depression

PDD

- Cognitive Impairment
- Parkinson's Dx for at least 1 year

Frontotemporal Lobe Dementia

- Described by Pick in 1892
- Disinhibition
- Impulsivity
- Impersistence
- Inertia
- Loss of social awareness
- Neglect of personal hygiene
- Mental rigidity,

- Utilization behaviour - i.e., a tendency to pick up and manipulate any object in the environment
- Echolalia, perseveration

Pain Scale

- This scale summarizes the presence and intensity of pain. This scale validates well against the **Visual Analogue Scale**.

- Frequency with which person complains or shows evidence of pain (J6a)
- Intensity of highest level of pain present (J6b)
- **0–4**
- Higher scores indicate more severe pain.

Depression Rates
Home Care and Aged Care

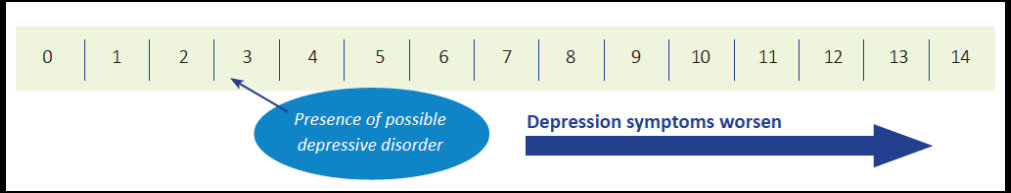


Figure 42: Home Care assessments – DRS scores

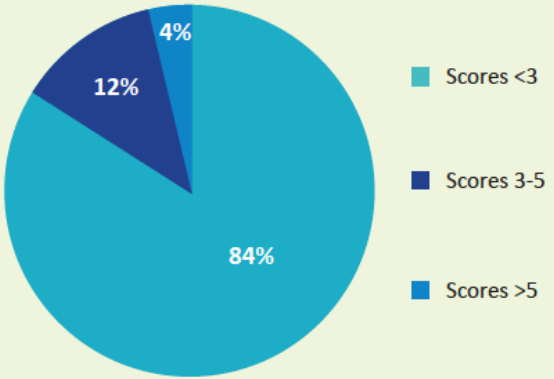
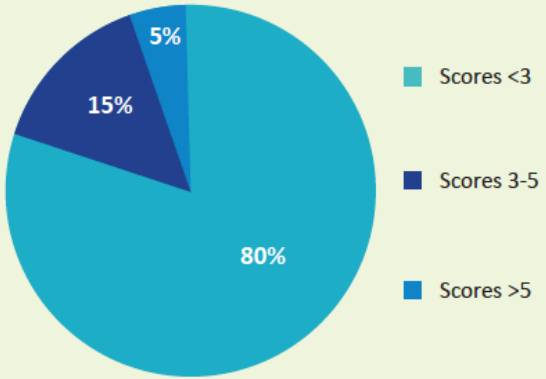


Figure 43: LTCF assessments – DRS scores



Source: National interRAI Software Service New Zealand, data 2014/15.

Unintentional Weight Loss

- Weight loss red flags:
  - 5% in a month
  - 10% in 6 months
- BMI <20

Weight Loss Assessment

- Oral health problems
  - Bad teeth
  - Jaw pain
  - Poor fitting dentures
- Swallowing difficulties
  - Coughing or choking on food
- Diarrhoea or Constipation
- Social factors
  - Loss of interest or difficulty with meal preparation – shopping, cooking
- Physical factors
  - Tremor
  - Difficulty holding utensils/ cups
- Underlying medical causes
  - Pain
  - Depression/ Anxiety
  - Gastro oesophageal reflux
  - Neurological problems – stroke / Parkinson's, Dementia
  - Diabetes
- Underlying pharmaceutical causes
  - Polypharmacy
  - Nausea inducing medication – e.g. morphine, tramadol

Cachexia versus Starvation

	Starvation	Cachexia
Appetite	Late suppression	Early suppression
BMI	Not predictive of mortality	Predictive of mortality
Albumin	Low in late phase	Low in early phase
Cholesterol	May remain normal	Low
Total lymphocyte count	Low, responds to re-feeding	Low, no response to re-feeding
Cytokines	Little data	Elevated
Inflammation	Usually absent	Present
With re-feeding	Reversible	Resistant

Thomas, D. "Distinguishing Starvation from Cachexia." *Clinics in Geriatric Medicine*. 2002; 18: 883-891

First line treatment

- Treat contributing factors e.g. constipation
- Implement basic oral nutrition support:

  small nutrient dense frequent meals & snacks,

  assistance or prompting to eat, food charts
- Weekly weight for 4 weeks
- Reassess:

  if weight loss continues move to 2nd line treatment

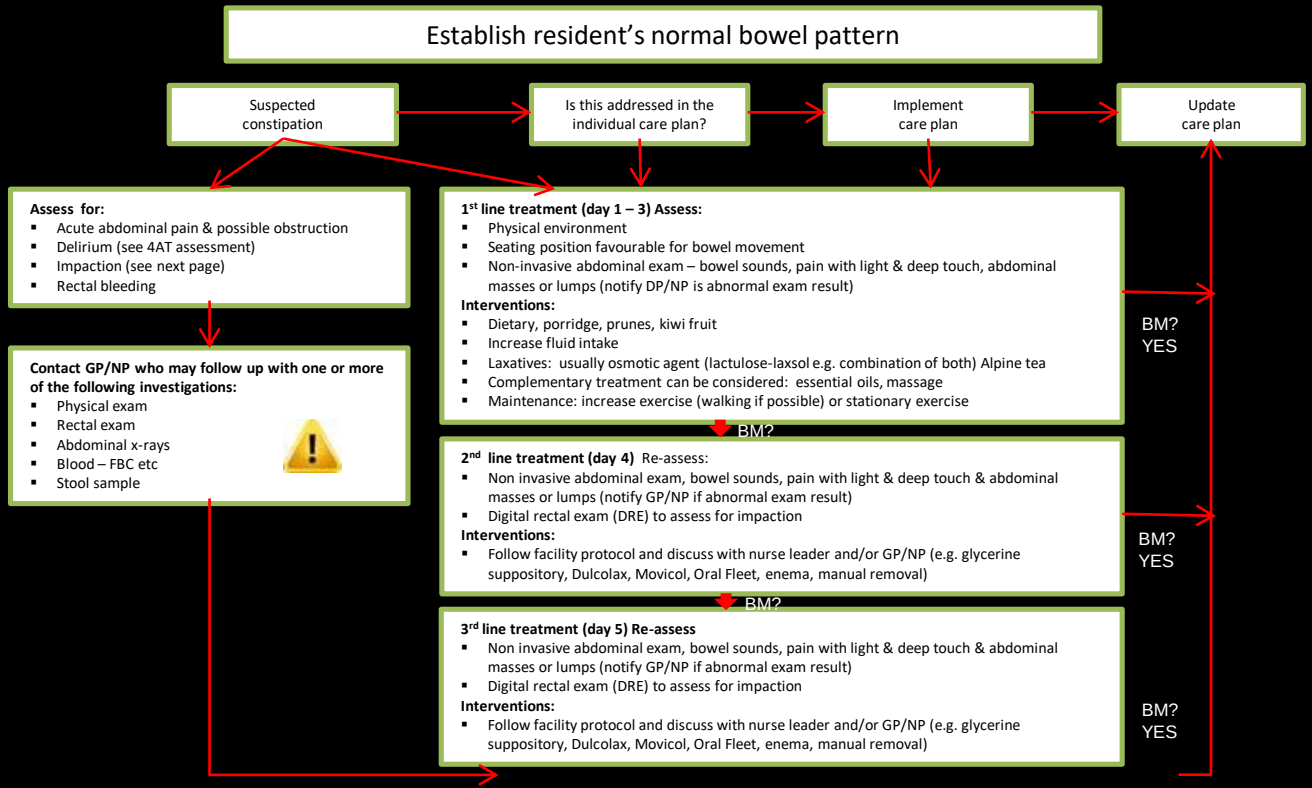
Second line treatment

- Continue weekly weighs
- Contact GP (may request lab tests - thyroid function, full blood count, serum transferase, albumin)
- SLT referral if appropriate
- Dietitian referral
- Increase energy & protein intake with nutritious fluids, smoothies, complan etc
- Reassess:

Stress Incontinence	Urge Incontinence	Functional
Involuntary loss of urine that occurs with increased abdominal pressure e.g. coughing etc May occur as a result of weakened pelvic floor muscles or malfunction of the urethral sphincter	Involuntary loss of urine that occurs with sudden need to urinate due to bladder contractions May result from neurological injuries e.g. spinal cord injury or stroke, MS, Parkinsons, Alzheimers. Other causes: infection, bladder cancer, bladder stones, inflammation or bladder outlet obstruction	Problems with thinking, moving or communication that prevents the resident of reaching a toilet although the urinary system is normal Causes include confusion, dementia, poor eyesight, poor mobility, poor dexterity, unwillingness to toilet because of depression, anxiety or anger.
Pelvic floor muscle exercises (3 months) Scheduled toileting Oestrogen cream surgery	Bladder training to increase capacity (6 weeks) Scheduled toileting Pelvic floor muscle exercises Anticholinergic medicines e.g. Oxybutynin to reduce bladder urge to empty urine	Scheduled toileting Bedside commode/hand held urinal

Overflow
Never feels urge to urinate, the bladder never empties and small amounts of urine leak continuously. Prevalent with enlarged prostate May be caused by weak bladder muscles, loss of bladder sensation or obstruction e.g. enlarged prostate, constipation, urethral stricture Signs and Symptoms include: no or rare urge to void, inability to void, continuous urine dribbling Clinical Findings: high residual volume of urine in bladder despite incontinence (measured with bladder scan or in/out catheter)
Assess for high residual volume of urine in bladder despite incontinence (measured with bladder scan or in/out catheter) Consider intermittent self-catheterisation or permanent IDC. Consider creatinine level given risk of bilateral hydronephrosis A trial of alpha blocker (e.g. Doxazosin, terazosin) may add small benefit Scheduled voiding and double voiding schedule.

Constipation



When to consider deprescribing?

- Patient presents with new symptoms which could be adverse drug effect (i.e. falls, confusion, fatigue)
- End-stage disease/ terminal illness
- Receiving high-risk drugs/ combinations
- Receiving preventive drugs in scenarios where drug can be safely discontinued

Priority Drugs for Deprescribing

- Survey of 65 Canadian geriatrics experts (36 pharmacists, 19 physicians, 10 CRNP), Modified Delphi approach
- Aim to ID and prioritize med classes where evidence-based deprescribing guidelines would be of benefit
- 5 priorities:
  - benzodiazepines
  - atypical antipsychotics
  - statins
  - tricyclic antidepressants
  - proton pump inhibitors.

Farrell B, et al. Plos ONE. Jan 1 2ol 10 Issue 4. re

Drug Withdrawal Trials

- Systematic review of 31 withdrawal trials (15 RCT, 16 observational)
  - Pts 65 and over
  - Multiple drug categories: Antihypertensives, psychotropics, benzodiazepines
  - Dc'd without harm in 20 to 100% of patients
- Reduction in falls and improvement in cognitive and psychomotor function (Psychotropics, Benzos)
  - Also replicated in another review (van der Cammen)
- 80% of participants with dementia were able to safely stop antipsychotics (Declercq T et al. Cochrane Database Syst Rev. 2013).
- Australian National Blood Pressure study
  - Found that 37% of participants remained normotensive 1 yr after drug withdrawal (Neson MR, et al. BMJ. 2002)

Advanced Care Planning Dementia

A. Capacity to communicate and make decisions: To be completed by Medical or Nurse Practitioner
In my opinion the resident _____ ***Does*** or _____***Does not*** *have capacity to make and communicate an informed consent about medical and mental health treatment.* (check applicable)

B. Cardiopulmonary Resuscitation (CPR): To be completed by Medical or Nurse Practitioner in collaboration with resident if they have decision-making capacity.
___CPR/attempt resuscitation ____DNR/Do not attempt resuscitation (Allow natural death)
___Attempting CPR would be medically futile in my opinion due to the resident's underlying medical co-morbidities

GP/NP/SMO Printed Name_____ Date_____

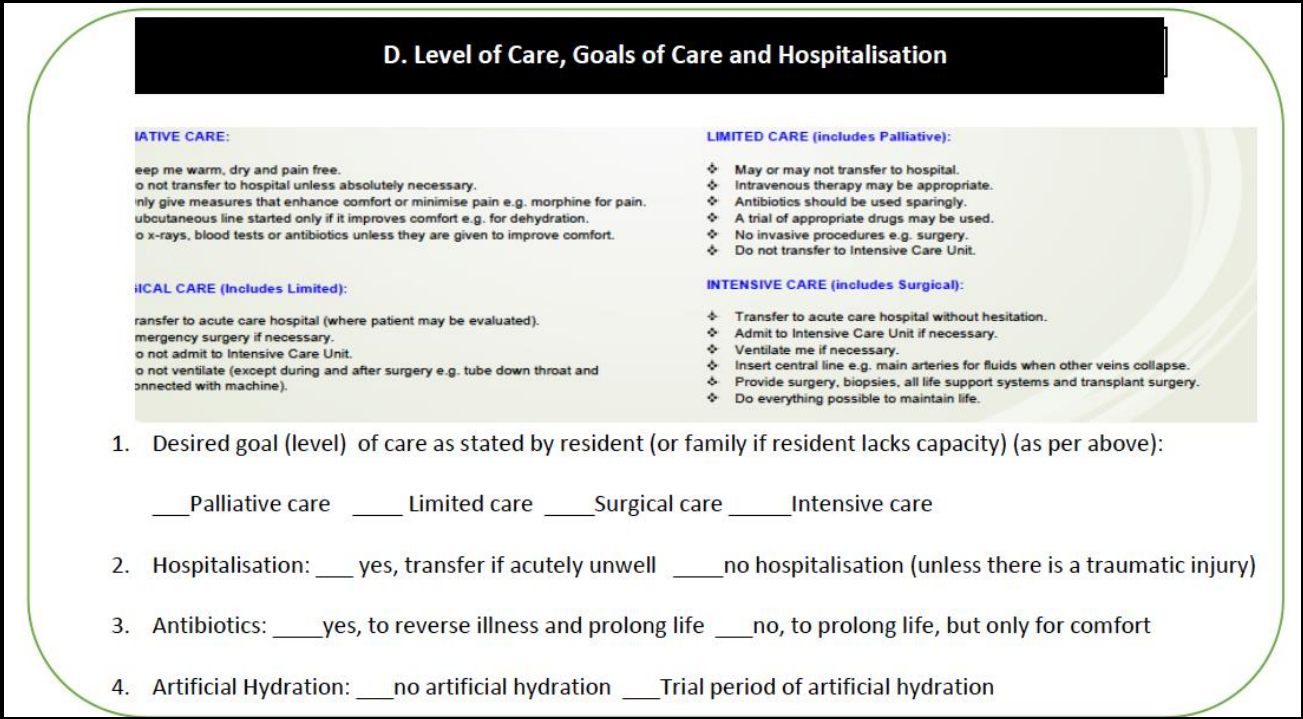
Signature_____

C. ***Enduring Power of Attorney for Health and Welfare:*** To be completed by nursing/management staff in collaboration with resident and/or family (if resident lacks capacity) (& D below)

Is there a designated Enduring Power of Attourney (EPOA) for Health & Welfare? ____Yes ____No
Is there a copy of the EPOA document at the facility? ____Yes ____No

Who is the designated EPOA for Health & Welfare?_____Relationship to resident:_____
Has the EPOA for Health and Welfare been formally actived? ____Yes ____No
(if does not have capacity, seek formal EPOA activation document from GP/NP/SMO)

Advanced Care Planning



D. Level of Care, Goals of Care and Hospitalisation

IATIVE CARE:

eep me warm, dry and pain free.
o not transfer to hospital unless absolutely necessary.
nly give measures that enhance comfort or minimise pain e.g. morphine for pain.
ubcutaneous line started only if it improves comfort e.g. for dehydration.
o x-rays, blood tests or antibiotics unless they are given to improve comfort.

iICAL CARE (Includes Limited):

ransfer to acute care hospital (where patient may be evaluated).
mergency surgery if necessary.
o not admit to Intensive Care Unit.
o not ventilate (except during and after surgery e.g. tube down throat and
onnected with machine).

LIMITED CARE (includes Palliative):

- 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 e.g. surgery.
- Do not transfer to Intensive Care Unit.

INTENSIVE CARE (includes Surgical):

- Transfer to acute care hospital without hesitation.
- Admit to Intensive Care Unit if necessary.
- Ventilate me if necessary.
- Insert central line e.g. main arteries for fluids when other veins collapse.
- Provide surgery, biopsies, all life support systems and transplant surgery.
- Do everything possible to maintain life.

1. Desired goal (level) of care as stated by resident (or family if resident lacks capacity) (as per above):

   ___Palliative care ____ Limited care ____Surgical care _____Intensive care

2. Hospitalisation: ___ yes, transfer if acutely unwell ____no hospitalisation (unless there is a traumatic injury)

3. Antibiotics: ____yes, to reverse illness and prolong life ___no, to prolong life, but only for comfort

4. Artificial Hydration: ___no artificial hydration ___Trial period of artificial hydration

Advanced Care Planning

Side 2: Advanced Care Planning – to be completed by resident (or family if resident lacks capcity)

A. This is what I (or my family want) others (including the healthcare team) to know about me:

1. What matters to me and makes my life meaningful:

2. What worries me:

3. My cultural and religious beliefs include:

4. If I become unable to make or communicate decisions related to my health:
_____I want my activated enduring power of attorney for personal care and welfare to make decisions using the information in this summary

_____I don't have an EPOA. I would like my healthcare team to decide, taking into account what matters to me and consultation with the following people:

Advanced Care Planning

Level of Care Definitions

ALLIATIVE CARE:

Keep me warm, dry and pain free.
Do not transfer to hospital unless absolutely necessary.
Only give measures that enhance comfort or minimise pain e.g. morphine for pain.
Subcutaneous line started only if it improves comfort e.g. for dehydration.
No x-rays, blood tests or antibiotics unless they are given to improve comfort.

URGICAL CARE (Includes Limited):

Transfer to acute care hospital (where patient may be evaluated).
Emergency surgery if necessary.
Do not admit to Intensive Care Unit.
Do not ventilate (except during and after surgery e.g. tube down throat and connected with machine).

LIMITED CARE (Includes Palliative):

- 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 e.g. surgery.
- Do not transfer to Intensive Care Unit.

INTENSIVE CARE (Includes Surgical):

- Transfer to acute care hospital without hesitation.
- Admit to Intensive Care Unit if necessary.
- Ventilate me if necessary.
- Insert central line e.g. main arteries for fluids when other veins collapse.
- Provide surgery, biopsies, all life support systems and transplant surgery.
- Do everything possible to maintain life.

5. Treatment and quality of life:

_____I would like my treatment to focus on quality of life. If my health deteriorated I would like to be assessed and given any treatments that may help me to recover and regain my quality of life. (Limited care, Surgical care, or intensive care as per above)

_____I would like to receive only treatments which look after my comfort and dignity rather than treatments to prolong my life. I do not want to be resuscitated. (Palliative Care as per above)

_____I cannot decide at this point. I would like my healthcare team to decide taking into account what matters to me and consultation with the following people.

_____

Thank You.

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

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06

Culturally diverse experiences of social connectedness and befriending services in Aotearoa, New Zealand

Professor Merryn Gott
Director of Research, School of Nursing, University of Auckland

Culturally diverse experiences of social connectedness and befriending services in Aotearoa, New Zealand

Merryn Gott
Te Ārai Research Group
University of Auckland

Loneliness plaguing elderly

Loneliness: The darkness of depression and anxiety

We need to talk about loneliness, New Zealand

Why loneliness is becoming so widespread in NZ and the organisations doing something about it

NZ Herald editorial: Loneliness in NZ far too widespread

Are connected Kiwis missing out on true connection?


TE PARIHA O
HIKURANGI

Overview

① Our project

② What older people told us about the experience of social isolation and loneliness

③ What would help?

Background

Gaps in evidence

- How older people define and understand social isolation and loneliness
- The role of cultural identity in shaping understandings and experiences of loneliness and social connectedness and preferred supports
- What interventions help

(Victor, 2014)

Our team

THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

National SCIENCE Challenges
AGEING WELL
Kia eke kairangi ki te taikaumātuatanga

Age Concern New Zealand
He Manaakitanga Kaumātua Aotearoa

Our study aimed to…

- Examine how social isolation and loneliness are understood and experienced by Māori, Pacific, NZ European and Asian older people.
- Identify factors which contribute to, and protect against, social isolation and loneliness.
- Investigate the ways in which Age Concern NZ's volunteer visiting service might contribute to addressing social isolation and loneliness in older adults.

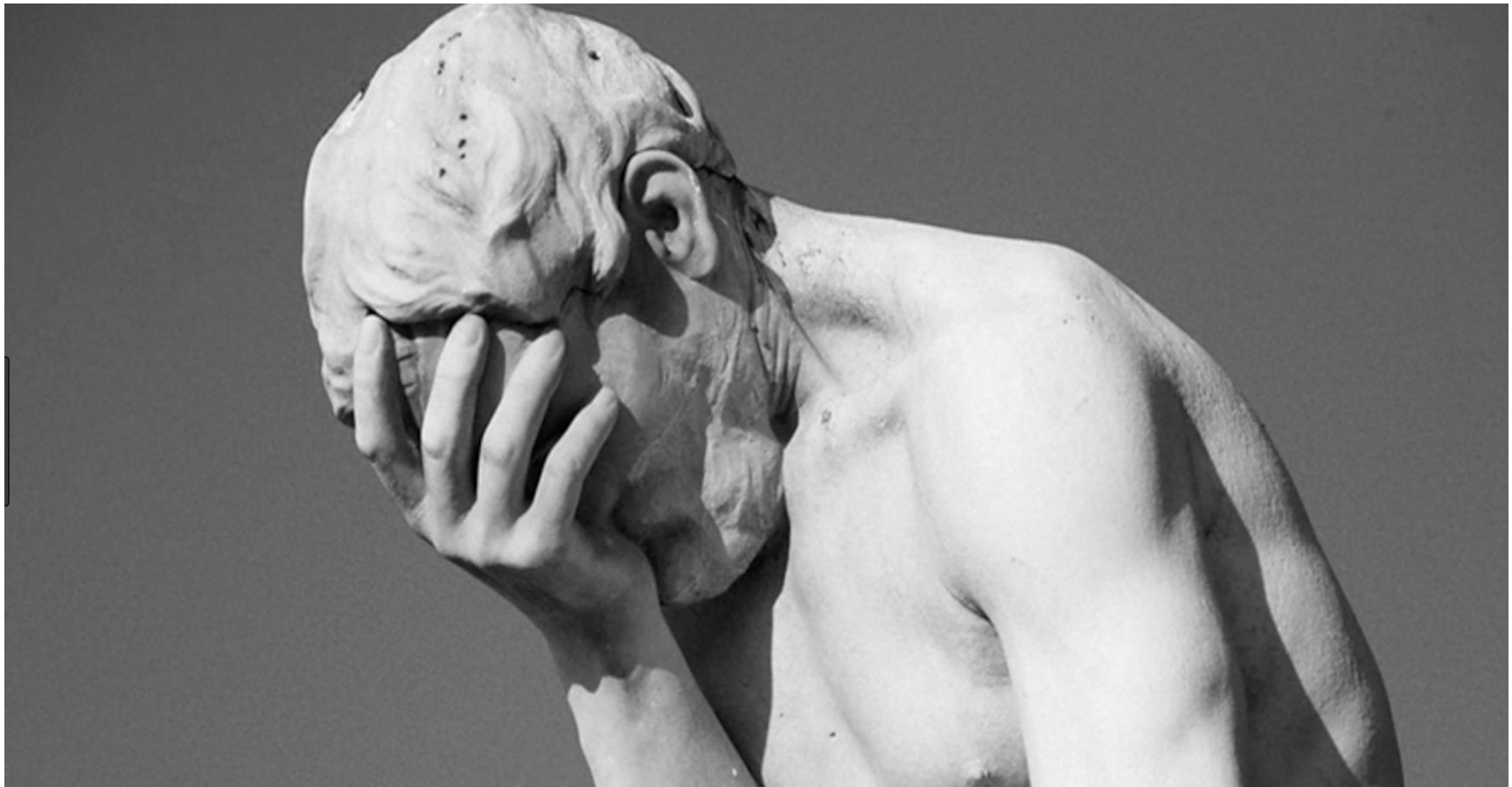
Methods

- Interviews with Māori (10), Pacific (10), Chinese/Korean older people (10), NZ European older people (14)
  - Half used the Age Concern Accredited Visiting Service
  - Half did not use the service, but self-identified as lonely.
- Three stakeholder focus groups with volunteers and providers (33).

What older people told us

1. Participants demonstrated sophisticated, culturally situated understandings of isolation and loneliness

2. Participants experienced stigma, sadness & shame related to loneliness

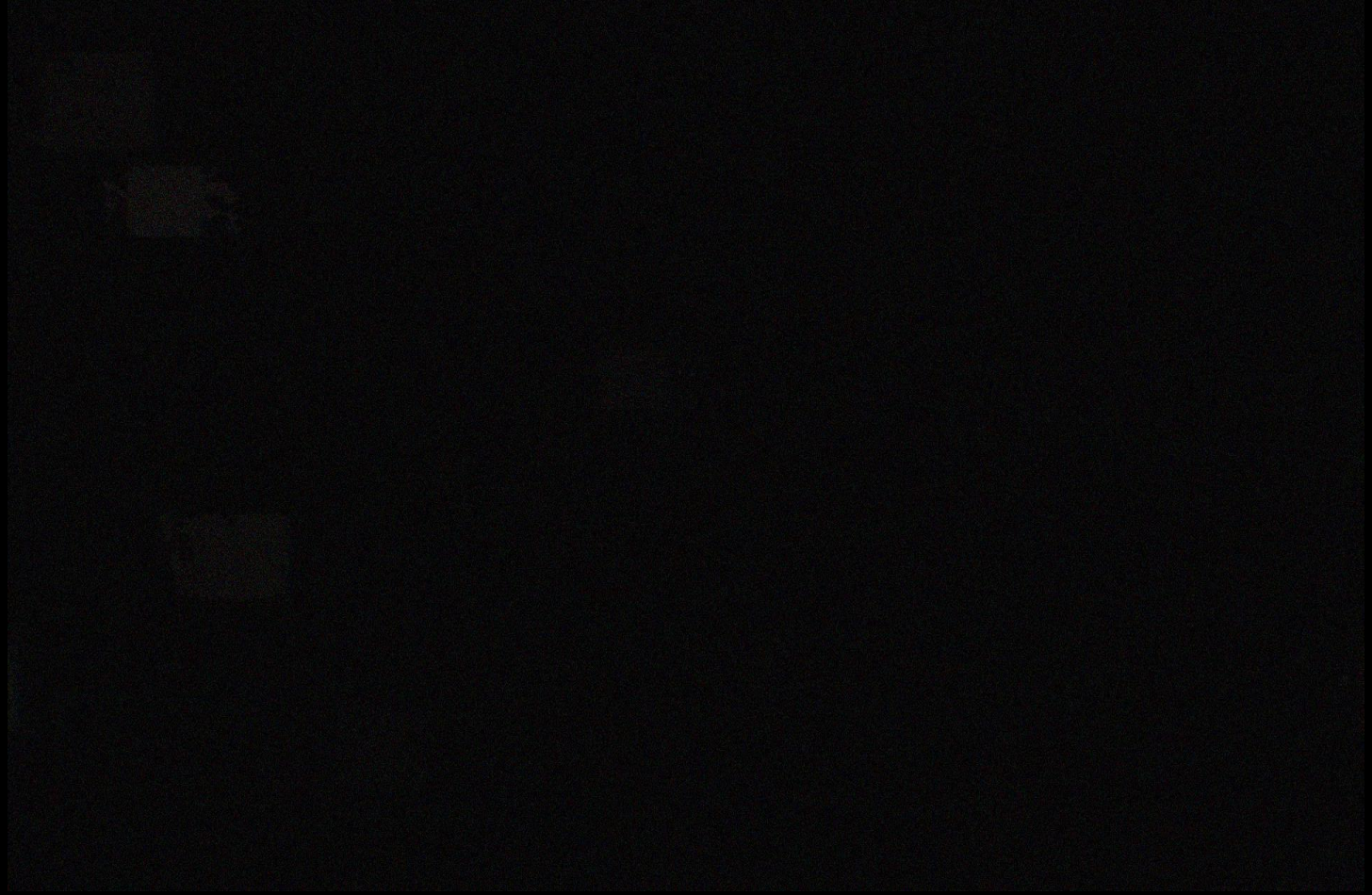


3. Participants showed great resourcefulness and strength

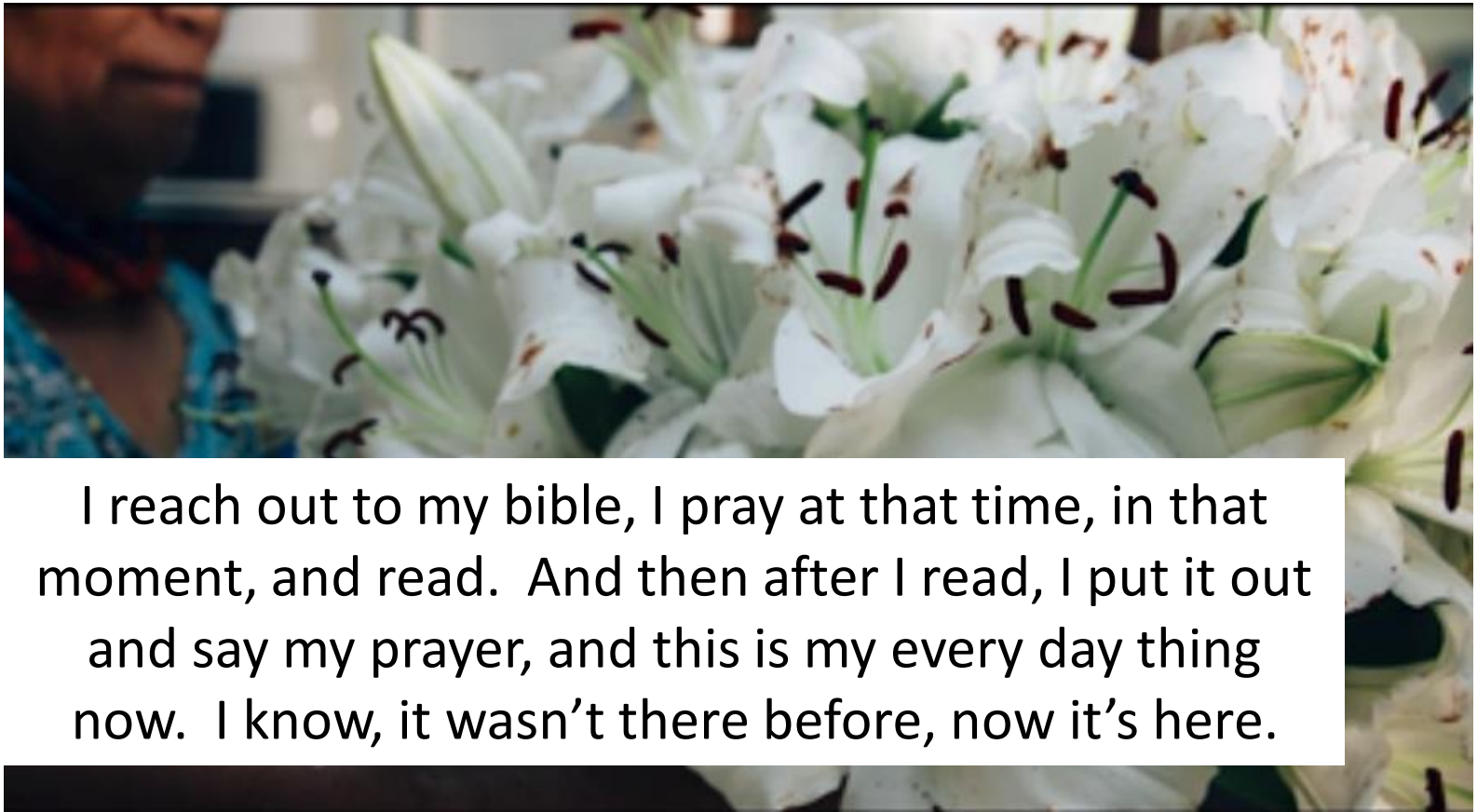
1. Many participants felt it was ‘their fault’ they were lonely

2. But barriers to being socially connected operated at many levels

3. For example:



Protective role of spirituality and church for Pacific older adults



I reach out to my bible, I pray at that time, in that moment, and read. And then after I read, I put it out and say my prayer, and this is my every day thing now. I know, it wasn't there before, now it's here.

Te Ao hurihuri/living in a changing world

Etahi kaumātua mokemoke

Mokemoke (loneliness) for older Māori also related to ability to connect to ancestral lands, tūpuna (deceased elders) and a way of life no longer available to them. Financial constraints and whānau migration were also discussed.

What would help?

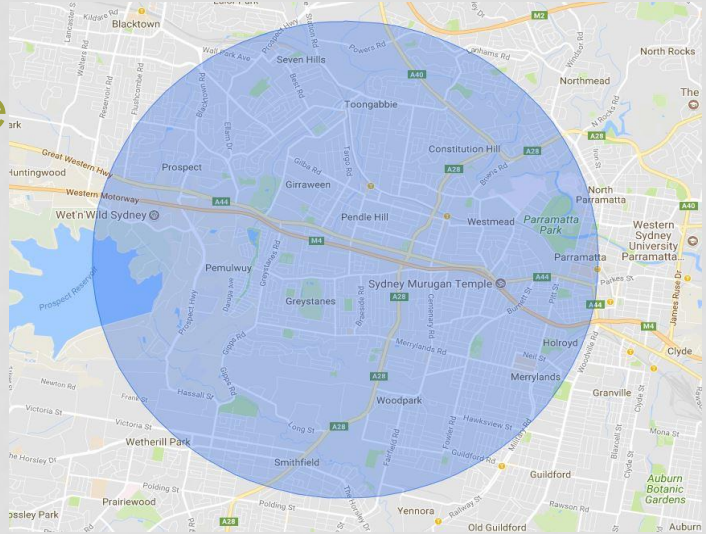
1. Promote reciprocal & inter-generational relationships

2. Recognise and support older people's contributions

3. Better connected communities

VISION: ACTIVE, CONNECTED & ENGAGED AGED-CARE ENVIRONMENTS

Imagine… if a residential aged care facility transformed from a place of care to a community hub where relationships and inter-generational social networks could thrive



THE 10K PROJECT: A COMMUNITY WELL-BEING APPROACH TO AGEING WELL

THE RESEARCH STORY SO FAR…

MARGUERITE KELLY ON BEHALF OF THE RESEARCH TEAM:
PROF DEBBIE HORSFALL, PROF ROSEMARY LEONARD, MARGUERITE KELLY

SENSE OF ISOLATION

Separate from the broader community

'Oh well life goes on for other people and they're outside and you're in here. […] You're sort of isolated.'
(Female resident)

SENSE OF ISOLATION

Socially isolated within the facility

'You're used to going to work each day and suddenly you can't go out unless you've got a family member or someone. And my family – they're all working so they can't come and take me out and I wouldn't expect it of them either because they've got things to do – but that really bugs me – the locked doors.' (Female resident)

WORKING AGAINST SOCIAL ISOLATION BY BUILDING RELATIONSHIPS

Maintain	Create	Shift (re-frame)
What already exists in terms of relationships with families, friends, clubs, interest groups etc. Idea: on intake do a social network map and build in keeping those connections alive and flourishing. 	New relationships both within and outside the facility • 1:1 • 1:group • group: group • organisation to organisation – community to community Think of group as large group and sub-groups. More opportunities to: • include more of the existing relationships (good example is the coffee shop) • invite the community in e.g: Bingo; café etc. • For residents to work on activities together, *resident directed but staff supported.* Community engagement and involvement.	The focus of existing activities to 'relationship building' both within the facility and with the 'community' – going out and coming in. Culture of passive consumers/unworthy residents Some of what is already happening: • Frocks and Fills. • Instead of being sung to singing with. Using the facility as a community resource and vice versa. From staff directed and resident received to resident directed and staff supported activities.

Annual Conference
Save the Date: 9 November 2018

Spaces are limited to 100

To register your interest email Kristy Kang: kristy.kang@auckland.ac.nz

Cost: $95

Compassionate Communities

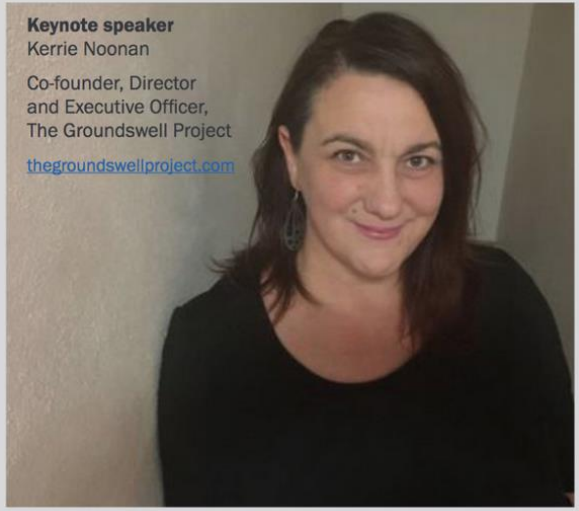
Starting the conversation in Aotearoa, New Zealand

Kia ora koutou, nau mai, haere mai - Welcome to our 3rd annual conference.

Interest is growing in Aotearoa, New Zealand concerning compassionate communties. Now is the time to learn from work undertaken so far, particularly in Australia, and to think about the unique needs of our diverse population. Therefore, we want to take this opportunity to foreground the conversation about what compassionate communities might mean within the NZ context.

We will also present our most recent research relevant to thinking about how 'compassionate' communities fit within an integrated model of palliative care.

Kerrie Noonan, Co-founder, Director and Executive Officer of The Groundswell Project in Australia will be the conference keynote speaker.



About Kerrie:
Kerrie co-founded The Groundswell Project in 2010 and is the lead on developing research-driven strategies that develop death literacy for Australians and drive innovation for developoing end of life services and systems. Kerrie has spent a number of years developing capacity building approaches to death, dying and bereavement. She is passionate about the role that the arts can play in facilitating social and cultural change about death.

Kerrie is a clinical psychologist in palliative care and has worked in health and community settings as a community development social researcher. She is a fellow of the School for Social Entrepreneurs at Western Sydney University.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@merryngott
www.tearairesearchgroup.org

Lunch

07

The older person's perspective

Ruth Busch

08

Solutions to loneliness: Professional perspectives

Panel discussion

09
How music makes a difference

Michelle Lee
Founder and CEO, I'm Soul Inc.)

Afternoon tea

10
The Neuroscience of Loneliness

Nigel Latta
Clinical Psychologist

pgpoc.com/gerontology

11
Closing address

Dr Elizabeth Niven
Board member, The Selwyn Foundation

Thank you