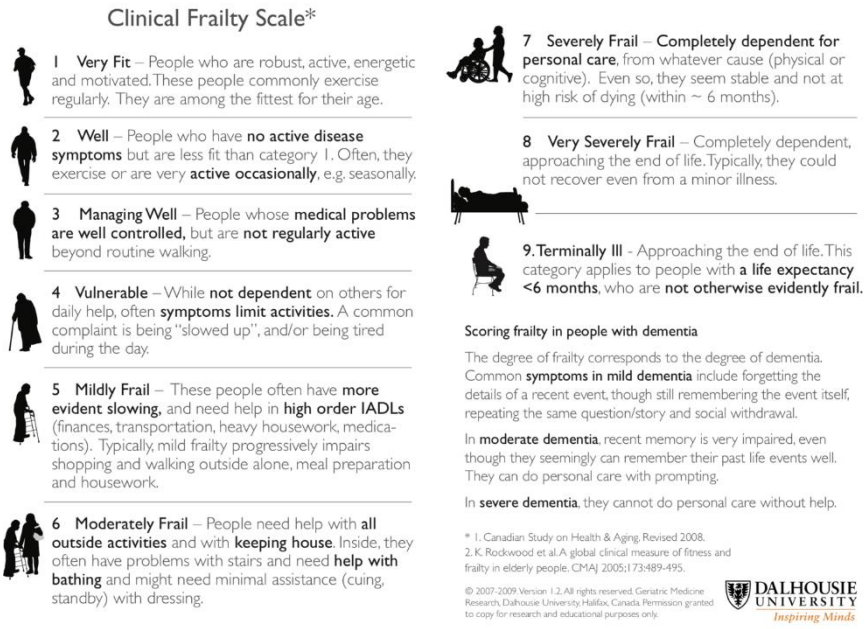
Frailty Focused Structured Medication Review in Care Homes – Practical Guide

Background

- Frail people (particularly Rockwood 6 or greater) are at significantly increased risk of adverse effects of medicines.
- There is increasing evidence that they are less likely to benefit from preventative medicine.
- Medicines can increase frailty, but there are no medicines which can treat frailty.
- At least 50% care home residents are likely to be in their last year of life.
- Many residents prefer to focus on symptomatic benefit over disease modification at this stage.
- Optimising medicine regimen will usually involve deprescribing – this requires careful language and discussion with resident +/- family.
- SMR should ideally be combined with advance care planning as both involve a discussion of priorities and wishes.

Assessing Frailty and Prognosis

There are younger people with frailty, and older people who are less frail – age and frailty should be considered in combination.
Rockwood frailty score can be a helpful tool in assessing frailty and act as a guide for reviewing medicines – see below.



Clinical Frailty Scale*

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.

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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Take particular note of changes in function and progression of frailty (i.e. trajectory) when considering prognosis. Indicators of poor prognosis may be:

- Progressive functional and cognitive decline
- Frequent falls and/or worsening mobility
- Frequent infections or admissions to hospital
- Weight loss, reduced appetite, increased sleepiness (in absence of acute cause)

The MMRI-R tool can be used to calculate 6 month mortality risk for new admissions to a care home and may help to identify/prioritise those at greatest risk.

Deprescribing Barriers and Solutions

Barrier	Solution
Negative perception of deprescribing as "giving up"	Clear discussions focusing on patient-centred outcomes, presenting percentage risks or NNTs if appropriate, using language such as 'trial without'.
Easier to leave status quo	Instead of asking "are your medicines ok?" try "Do you think your medicines are doing you good? Do you think any of them are doing you any harm?"
Drugs started by specialists	Often clinical picture has changed since initiation – most specialists would support review. Use A&G or contact secondary care medicines information if need advice.

	Poor recognition/understanding of progressing frailty and effect on medicines	Frailty scoring Assessing prognosis Combining meds review with ACP discussions

<table>
<tr><td>Core Principles</td><td colspan="3">
One size does not fit all – take a person-centred approach.
Discuss priorities in context of frailty and likely prognosis with resident +/- NOK.
Assess adherence/compliance via carers and confirm actual usage of PRN meds.
Consider new symptoms as possible side effects of other drugs rather than adding more drugs.
Be pragmatic in approach. Focus less on numbers – are blood tests still appropriate? Will the result change management?
Consider dose adjustment in weight loss.
Consider original indications – are symptoms still present? Was treatment ever effective? Is benefit still greater than harm?
Treat all changes as a trial, ongoing regular review is essential for effective deprescribing.
Think about order and priority of changes – it may not be appropriate to make all changes at the same time (especially in context of cognitive impairment) so deprescribe gradually.
Document rationale for decisions about each medicine not just outcome (even if not changed), to prevent future duplication.
</td></tr>
<tr><td rowspan="6">Specific Areas/Diseases/Drug Classes</td><td>Area of focus</td><td>Issues/Targets</td><td>Suggestions</td></tr>
<tr><td>Analgesia - opioids</td><td>Increased risk SEs, particularly constipation & confusion.
Often started for medium-term pain e.g. post #, or trialled for behavioural issues in dementia.</td><td>• Avoid codeine if possible (constipation is not dose-related)
• Co-prescribe laxatives (senna and/or macrogol)
• Regular review
○ Has there been any benefit? Or side effects?
• Has source of pain resolved (e.g. # healed)?</td></tr>
<tr><td>Anticholinergic burden (ACB)</td><td>Significant risk of worsening frailty syndromes with cumulative ACB score of 3 or more</td><td>• Calculate ACB score
• Aim to lower overall score through stops or swaps
• Pay particular attention to highest scoring drugs such as amitriptyline and oxybutynin</td></tr>
<tr><td>Antidepressants</td><td>Evidence for efficacy in dementia is poor (particularly for anxiety related to dementia).
Limited evidence for >5yrs use.</td><td>• Consider weaning at every opportunity and especially if no clear benefit after starting/titrating, change in situation, or risks outweighing benefits
• The phrase ‘trial without’ rather than ‘stop’ is helpful!
• Wean gradually</td></tr>
<tr><td>Antipsychotics & sedatives</td><td>Only recommended for short-term use at lowest effective dose due to increased risk mortality.
Increased falls risk, sedation and confusion.</td><td>• As per antidepressants!
• Involve MH team if concerned</td></tr>
<tr><td>Bone protection</td><td>Limited value in prognosis <1yr, and/or if no longer mobile.
Adherence to oral bisphosphonates often poor due to positioning/swallow/fluid intake.</td><td>• Check adherence/compliance
• Stop bisphosphonates and consider stopping vit D if poor prognosis or not mobile
• If dietary calcium intake sufficient can stop combined calcium/vit D or change to vit D alone</td></tr>
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	DAMN drugs *(Diuretics, ACE inhibitors, metformin, NSAIDs)*	Risk of AKI +/- admission with dehydration/acute illness	• Consider appropriateness of use (and appropriateness of blood tests!) • Raise awareness of sick day rules with staff

	Dementia drugs	Anticholinesterase inhibitors ineffective if not taken consistently. Very advanced dementia – unlikely to benefit. Memantine can paradoxically increase agitation.	• Stop if poor/unreliable swallow or compliance • Reduce dose memantine in poor renal function (max 10mg eGFR<30)

	Diabetes	Rockwood 5-6 – target HbA1c 60-85mmol/mol. Rockwood ≥7-9 – target HbA1c >60mmol/mol. Aim to avoid hypos and only treat *symptomatic* hyperglycaemia.	• Reduce or stop diabetes meds • Avoid hypoglycaemic agents (e.g. gliclazide) • Avoid metformin in eGFR<30 • Do not restrict diet if low BMI or losing weight • Consider if insulin can be reduced or stopped, aim for once daily long-acting regimen • Stop statins and BP drugs • For T1DM continue insulin but aim to simplify to OD regimen
	Hypertension	For Rockwood ≥6 with reduced mobility – target BP >140 systolic	• Check lying/standing BP (especially if falling) • Reduce or stop antihypertensives if BP <140
	Inhalers	Inspiratory effort and coordination often much reduced in mod-severe frailty. Reduced activity and/or very stable disease (i.e. no exacerbations).	• Consider MDI via spacer • Step-down or stop therapy if no/low exacerbations/symptoms
	Laxatives	Constipation often under-reported, be aware of overflow diarrheoa. Docusate is rarely effective & high tablet burden. Movicol often most effective in frailty but requires good fluid intake.	• Ask about current bowel habits/check bowel charts • Consider formulation and fluid intake • Stop docusate unless clear benefit for individual
	Oral nutritional supplements (ONS)	Context of weight loss important (e.g. recognising dying). Food first approach.	• Check compliance (expensive waste!) • Look at 6 month weight trend rather than BMI alone • Nutrient dense meals & snacks e.g. nut butters, eggs, yoghurt
	Prostrate drugs (e.g. tamsulosin & finasteride)	Initiated for urinary symptoms but patient now has LTC	• Stop if LTC unless recommended by urology
	Statins	Primary prevention with <4yr prognosis – unlikely benefit. Secondary prevention annualised NNT to prevent serious vascular event = 68-74.	• Stop primary prevention unless patient preference to keep • Consider stopping all indications if in last year life • Switch simvastatin to atorvastatin (better tolerated, can be given any time of day)