# Deprescribing in frailty

- A process of rationalising medication
- Requires time with patient and carer/family
- Likely to be an on-going process, 1-2 drugs at a time usually
- Combine with advance care planning

| Background | What is frailty? | Age and frailty |
|---|---|---|

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# Background

There is increasing evidence regarding the relative risks and benefits of many classes of drugs in frailty (Rockwood Score of 6 or greater).

This evidence is currently not reflected strongly in either NICE Guidance (CG87 - 2014), where frailty fails to receive a mention, or in the QOF targets. Frail people are at marked increase in risk of adverse effects of treatments including hospital admission, and are less likely to benefit from the long-term benefits of new or even ongoing preventative treatments.

# Frailty

## Assessment of frailty

Frailty is essentially the **loss of reserve** resulting in a greater vulnerability to insults. There is no pharmacological treatment which will correct loss of reserve and, paradoxically, many drugs which may worsen it. Frailty is generally associated with multi-morbidity and often seen in terms of dependency.

- Suspect where :
  - syndrome of losing weight, strength & energy
  - Frequent infections cause functional decline
  - Frequent falls
  - Confusion and functional decline
- **Determine degree of frailty using Rockwood scale** (click "Rockwood scale" to go to slide)

# 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 syptoms** 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 dependant** on others for daily help, often **syptoms 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 and 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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# Frailty and age

- There are younger people with frailty e.g. eFI finds that 7% of those with frailty are under 65 years
- Those under 65 are likely to have a better life expectancy than those equally frail but over 75.
- The principles here apply to all those with frailty, but the **precise guidelines here are aimed principally at those over 75 years**.

# Barriers to deprescribing

- Clinician anxieties
  - How patient/family will perceive this
  - Easier to leave status quo
  - Drugs started by specialists
- Patient anxieties
  - Faith in their medicines (over-estimate benefits)
  - Trust the prescriber
  - Take "for the rest of your life"

**Addressing barriers to Deprescribing**

# Addressing barriers to Deprescribing

Clinicians worry how patients may perceive stopping medications – has the doctor given up on them?

*Clear discussion about continuing to give care and focusing on achievable, patient-centred outcomes*

GPs may struggle for adequate time to review longstanding medications or be reluctant to stop drugs started elsewhere by a colleague, especially a "specialist".

*Often the clinical picture has altered significantly since the initial prescription. More co-morbidity, physical and metabolic changes, adverse effects. Regular review by a GP is* ***expected and welcomed*** *by the vast majority of specialists. Utilise the experience of practice-based pharmacists or nurses to review medications.*

Patients may over-estimate the value of medication e.g. this pill will stop me having a stroke. Prescribers may have been complicit in this in attempts to ensure treatment adherence.

*There may be some benefit for some people in looking at NNTs (see Table 1). It is good to appreciate that most trials have deliberately excluded patients with co-morbidities, the very elderly and complex. NNTs therefore can vastly overestimate the likely benefit in the frail.*

# Benefits vs burdens

- Over-rating of benefits
  - Preventive drugs – is this still appropriate?
  - Symptomatic drugs – are the symptoms still there?
- Under-estimating burdens
  - Cumulative Side-effects much more common in old age, and worsened by 'lack of reserve' in frailty
  - Risk of errors
  - Polypharmacy and drug interactions
  - Acute illness alters drug handling and increases risks

# Principles

1. **Understand the patient context**
2. **Adherence with drug regime**
3. **Respond to weight loss**
4. **Side-effects causing symptoms**
5. **Most beneficial drugs**
6. **One (or two) step at a time**

## Principle 1 – understand

- Understand their priorities, goals and fears
- Understand the non-drug burdens from treatments (blood tests, x rays, clinics)
- Try to guesstimate life expectancy
  - Less than 2 years means preventive drugs unlikely to confer benefit
  - Less than 1 year should signal advance care plans and symptom drugs only

## Principle 2 – adherence

- Poor adherence may have multiple causes e.g.
  - Understanding or confusion
  - Physical compliance with containers/inhalers etc
  - Attitude to medication
- This needs to be understood and accepted as part of process

## Principle 3 – notice weight loss!

- Titrate down drugs as weight loss occurs (part of frailty syndrome)
  - BP drugs
  - Analgesia
  - PD drugs
  - Diabetic drugs etc

## Principle 4 – side-effects

- If new symptom, it may be side-effect, try to stop drug rather than start an antidote
  - Dyspepsia / nausea
  - Itch
  - Dizziness
  - oedema

## Principle 5 – most beneficial

- If no symptoms for 5-10 years, unlikely to need
  - Angina
  - Dyspepsia
  - Dyspnoea
  - Seizures
- Stay on drugs giving benefit with little harm

## Principle 6 – gradually!

Usually stop one drug at a time
[in hospital or a crisis, may be more radical!]

Take family with you
– positive rather than negative messages!

Review – ongoing process

# Disease areas

- Diabetes
- Hypertension
- Cholesterol reduction
- Epilepsy
- Osteoporosis
- Angina
- Heart failure
- Dementia
- COPD
- Analgesia

# Diabetes

| Level of frailty | Therapeutic target | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br>**Generally able** | • HbA1c 54-59<br>• BP 145/85 | Appropriate to use third line agents<br>Reassess if worsening frailty |
| **Rockwood 5-6**<br>**Modest frailty** | • Control of symptoms<br>• HbA1c 60 – 85<br>• BP 160/90 and no postural drop | Review metformin if eGFR <50 or low weight<br>Do not use third line agents unless to control symptoms<br>Do not restrict diet if low wt or losing weight |
| **Rockwood 7-9**<br>**Severe frailty** | • Symptom control<br>• Avoid hypos<br>• HbA1C only to identify risk of hypos (aim >65)<br>• Usually no BP Rx | Reduce treatment<br>Symptomatic drugs only – stop other drugs eg statins, BP<br>Stop metformin if eGFR <30 Consider stopping sulphonlyurea or insulin (type 2)<br>Watch for falling weight<br>In EOL Type 1, give low dose once daily longacting insulin |

# Hypertension

| Level of frailty | Therapeutic target | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br>**Generally able** | • BP 145/85<br>• NNT 120/annum in >80s to prevent one TIA/stroke, but takes 2 years for effect | Always measure lying and standing BP in >75s<br>Review if reports a fall |
| **Rockwood 5-6**<br>**Modest frailty** | • BP 160/90 and no postural drop | Stop alpha blockers if fall or dizzy<br>Stop calcium channel in heart failure/oedema<br>Stop thiazide if low sodium or urinary frequency |
| **Rockwood 7-9**<br>**Severe frailty** | • Usually no BP Rx | Stop antihypertensives |

# Cholesterol reduction

| Level of frailty | Therapeutic target | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br><br>**Generally able** | • Usual indications | Usual Rx – may reduce dose in low cholesterol |
| **Rockwood 5-6**<br><br>**Modest frailty** | • Usual guidelines<br>• 20 prevention, NNT 160 to prevent one vascular event after 2 years, no effect on mortality | Consider stopping if life expectancy less than 2 years<br><br>Consider stopping if falling due to weakness, or may just reduce dosage (eg avoid 80mg atorvastatin) |
| **Rockwood 7-9**<br><br>**Severe frailty** | • No added value | Stop cholesterol drugs |

# Epilepsy

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br><br>**Generally able** | • Usual Rx | Usual Rx |
| **Rockwood 5-6**<br><br>**Modest frailty** | • Valproate usual 1st choice<br>• Levitiracetam often 2nd choice<br>• Minimise use of phenytoin | • If faller, check Vit D (esp phenytoin and valproate) and consider reducing doses<br>• Reduce doses or stop if seizure free 10 yrs<br>• Reduce doses if losing weight |
| **Rockwood 7-9**<br><br>**Severe frailty** | • Rx usually continued | • Reduce doses if delirium<br>• Consider midazolam by syringe driver in EOL if poorly controlled |

# Osteoporosis

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br><br>**Generally able** | • Usual Rx | Usual Rx |
| **Rockwood 5-6 Modest frailty** | • Alendronate for 5 yrs 1st choice<br>• Denosumab for Rx failures, or those not able to comply with bisphosphonates<br>• Usually combined with Vit D | • Review compliance<br>• Give Vit D if frequent faller<br>• Thorough medication review if faller, and reduce anticholinergic burden |
| **Rockwood 7-9 Severe frailty** | • Drugs unlikely to be of value if life expectancy < 1yr<br>• May still consider Vitamin D | • Stopping Rx if poor life expectancy |

# Angina / IHD

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br><br>**Generally able** | • Usual Rx<br>• Medical Rx for stable angina | Referral when unstable angina<br><br>Referral if uncontrolled on 2 drugs |
| **Rockwood 5-6**<br><br>**Modest frailty** | • Usually 1-2 anti-angina drugs<br>• Usually aspirin and statin | • If uncontrolled and referral not wished, then 3rd drug added<br>• If asymptomatic , consider stopping one drug (ISMN or calcium channel first to stop)<br>• If falling, consider stopping 1-2 drugs |
| **Rockwood 7-9**<br><br>**Severe frailty** | • Angina less likely if immobile | • Stop aspirin & statin (NNT to prevent ischaemic event 250/yr, and no sig reduction in mortality)<br>• Stop angina drugs if asymptomatic<br>• B blocker at low dose |

# Heart failure

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br>**Generally able** | • Usual Rx | • Involve Community Heart Failure<br>• Services to optimise HF treatment |
| **Rockwood 5-6**<br>**Modest frailty** | • Optimise Rx with loop diuretic + ACE + beta blocker<br>• NNT 15 to prevent one death/yr<br>• Symptom benefit | • Community heart failure service<br>• Control oedema if possible, but consider alternative causes of oedema e.g. dependency, Ca blocker<br>• Monitor U+Es, but higher doses diuretic may be needed in CRF<br>• Use spironolactone with care especially in CRF and watch K+ |
| **Rockwood 7-9**<br>**Severe frailty** | • Continue Rx to reduce risk of terminal CCF<br>• Furosemide in syringe driver EOL | • Symptom management and less concern regarding renal function<br>• May continue low dose ACE and diuretic even where BP is low as long as not dizzy or syncope |

# Dementia

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br>**Generally able** | • Usual Rx | • Dementia register<br>• Community dementia nurse |
| **Rockwood 5-6**<br>**Modest frailty** | • Titrated cholinesterase inhib<br>• Memantine if behaviour problem<br>• Taper antipsychotic after 3 months (Unless also other psych disease) | • Dementia support worker<br>• Power of attorney<br>• Advance Care Planning documented<br>• Reduce/avoid anticholinergic drugs if possible eg antimuscarinics, antihistamine, central anti-emetic, tricyclics |
| **Rockwood 7-9**<br>**Severe frailty** | • Usually stop dementia drugs<br>• Memantine for behaviour problems<br>• Minimise other drugs to reduce risk of delirium | • Delirium very likely<br>• Management plan for delirium<br>• Stop drugs if swallow now unreliable |

# COPD

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br>**Generally able** | • Usual Rx | |
| **Rockwood 5-6**<br>**Modest frailty** | • Usual Rx<br>• Once daily inhalers if possible<br>• Care with use of theophyllines (if polypharmacy) | • Ensuring compliance with inhaler therapy<br>• Consider stopping theophylline<br>• Anticipatory Care Plan |
| **Rockwood 7-9**<br>**Severe frailty** | • Usual Rx but may be unable to use inhalers<br>• Avoid theophyllines<br>• Avoid oral salbutamol | • Anticipatory care plan for managing exacerbations at home<br>• Consider palliative oxygen therapy |

## Analgesia

| Level of frailty | Treatment guide | Suggested actions |
|---|---|---|
| **Rockwood 1-4**<br><br>**Generally able** | • Maximum doses of opioids for chronic pain if aged >80 | • Usually not to exceed:-<br>– Morphine 60mg bd<br>– Fentanyl 25 mcg patch |
| **Rockwood 5-6**<br><br>**Modest frailty** | • NSAID's only if eGFR >30, and then only short term<br>• Buprenorphine patch useful for poor compliance, but less flexible<br>• Neuralgic drugs addictive and side-effects | • 2 weeks only NSAID – naproxen 500mg bd or ibuprofen 400mg bd<br>• Remember opioid equivalence for fentanyl<br>• Co-prescribe laxatives – stimulant plus softener<br>• Pregabalin 150mg per day max Gabapentin 900mg per day max |
| **Rockwood 7-9**<br><br>**Severe frailty** | • Often reduce doses<br>• Risk of over treatment with patches<br>• Abbey pain scale | • Titrate doses down with weight loss<br>• Titrate all drugs down if delirium (anticholinergic burden)<br>• Assess for constipation |