Frailty: what’s it all about?
What is frailty?

1. an inevitable consequence of aging
2. A state due to multiple long term conditions
3. A condition in which the person becomes fragile
4. A state associated with low energy, slow walking speed, poor strength
5. A condition for which nothing can be done
• Answer: 4- low energy, slow walking speed, reduced strength

• So the other are untrue-
  • not inevitable,
  • associated with multiple LTC, but can occur in the absence of these
  • amenable to treatment
  • unlike “fragility” frailty is a specific syndrome with characteristic features, and a rapidly expanding research base
Frailty: why is it important

• Definition: a state of increased vulnerability to poor resolution of homoeostasis after a stressor event

• Condition associated with increased risk of deterioration:
  • “acute frailty syndromes” – falls, delirium (or acute confusion), “off legs” may result from a relatively minor insult
  • Higher risk of acute hospital admission
  • Care home admission
  • Death
Response to an adverse event in a non-frail vs frail older person

(Clegg et al, Lancet 2013)
How is frailty diagnosed?

• Phenotype model:

  • Walking speed reduced, grip strength low, immune deficits, reduced ability of withstand an “insult”

  • Useful in clinical trials, difficult to implement on large scale,
  • Walking speed
  • timed up and go test (TUGT) used
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Cumulative deficits model

• Proven to correlate with comprehensive geriatric assessment

• Theoretical background to the development of the electronic frailty index (eFI); searches in the primary care record for 36 variables (diagnoses, symptoms, sensory impairments, disabilities)

• Proven to identify risk of hospital admission, care home admission, death
Using the eFI

• Proven statistically to identify a cohort of people who are highly likely to be frail

• Like any other statistical tool will identify false positives, hence clinical correlation is essential

• Clinical knowledge of patient, TUGT or other frailty assessment
Is frailty amenable to prevention and treatment?

- Yes

- “healthy ageing” reduces the risk of developing frailty:
  - Good nutrition
  - Not too much alcohol
  - Staying physically active
  - Remaining engaged in local community/ avoiding loneliness
  - Patients can be signposted to the NHS England and Age UK publications
What about established frailty?

- Adverse effects of frailty can be mitigated - for example:
  - Falls risk can be reduced
  - Timely medication review can reduce risk of ADR, drug interaction, non-compliance
  - ...hence BGS delighted to see the new GP contract
Frailty prevalence at various ages

Gale et al, 2015
Ageing population

Telegram overload - centenarians will continue to be the fastest growing age group

Thousands, UK

Government Actuary’s Department
Turning around years of Medical Practice

The Past
• Single organ specialties
• Disease focused goals
• Non-integrated services
• Reactive care

The Future
• Patient centred care
• Principles of Comprehensive Geriatric Assessment
• Proactive person centred care planning
New GP contract

• Identify and code for moderate and severe frailty
• Ask for consent to share further information using the Summary Care Record

• For severely frail patients:
  • Falls assessment
  • Medication review
Severe frailty:

- Average practice list per GP:
- 2,000 (significant variation around the country)
- 7% of the population over 65 yrs are likely to be severely frail
- In an average practice this is about 27 patients per GP

- “Pulse” estimate 0.5% of practice population
Comprehensive Geriatric Assessment

• Multidisciplinary assessment of physical, psychosocial, functional and environmental factors

• Multidisciplinary team come together to agree a plan with the patient (and where appropriate their family)

• Plan enacted; team can ensure actions implemented

• Review with agreement of any further actions

• Patient receiving CGA 12 times more likely to be alive and living at home 6 months after intervention NNT 24
Falls assessment

• Evidence is for multidisciplinary assessment, commonly several factors identified:

• Eg 87 yr lady with dementia, hypertension, ischaemic heart disease, diabetes (type II), osteoarthritis

• 3 falls in the last 4 months.

• One known about by practice when fractured radius
• Taking night sedation (long acting benzodiazepine), gliclazide, enalapril, isosorbide mononitrate, paracetamol, amlodipine, GTN spray
• Urgency, frequency, nocturia- falling at night trying to get to the toilet
• Painful OA, disuse wasting of quads
• Wearing spectacles- no vision check for 2 yrs
• HbA1C 52
• L/S BP: postural drop- enalapril dosage reduced
• HbA1C too tight- on gliclazide 80mg once daily- stop
• Night sedation slowly weaned
• Over active bladder symptoms identified and treated
• Commode next to the bed supplied
• Family arranged optician check- specs updated (no bi-focals)
• Improve analgesic treatment of knees- encourage and support to attend local gentle exercise group
• Extra rail on the stairs fitted
NICE guidance: multifactorial assessment (re falls)

- identification of falls history
- assessment of gait, balance and mobility, and muscle weakness
- assessment of osteoporosis risk
- assessment of the older person's perceived functional ability and fear relating to falling
- assessment of visual impairment
- assessment of cognitive impairment and neurological examination
- assessment of urinary incontinence
- assessment of home hazards
- cardiovascular examination and medication review
NICE: multifactorial interventions

• strength and balance training
• home hazard assessment and intervention
• vision assessment and referral
• medication review with modification/withdrawal

• One study (2016) found that 65% people admitted to hospital after a fall were taking at least one medication associated with falls
Medication review

• 23% of all over 75 yr olds taking inappropriate medications
• Recent paper analysing primary care patient safety incidents highlighted medication issues
• High risk medications: warfarin, insulin/ sulphonyl ureas, opiates
• Problematic combinations: NSAIDs and ACE inhib
• NSAIDs and warfarin
Guides to support deprescribing

• www.polypharmacy.scot.nhs.uk/
• https://www.york.ac.uk/media/crd/effectiveness-matters-aug-2017-polypharmacy-pdf
• https://www.nice.org.uk/guidance/ng56
Useful resources from BGS and others