PrescQIPP Community Interest Company

Polypharmacy and deprescribing - Multimorbidity

NICE NG56 covers optimising care for adults with multimorbidity (multiple long term conditions) by reducing treatment burden (polypharmacy and multiple appointments) and unplanned care.[1] The guideline sets out which people are most likely to benefit from an approach to care that takes account of multimorbidity, how they can be identified and what the care involves. This project reviews the recommendations and provides supporting tools to aid the process. This project should be used with the polypharmacy and deprescribing webkit resources: https://www.prescqipp.info/polypharmacy-deprescribing-webkit

Recommendations

- Ensure a patient centred approach to morbidity taking into account patient values, benefits and goals. Assess physical and mental health conditions.[1]
- Assess disease and treatment burden.[1]
- Identify patients with multimorbidity who could benefit from tailored care, opportunistically during routine care and proactively using electronic health records.[1]
- Prioritise for review those patients taking more than 15 medicines. Also consider review in those patients taking 10 to 14 regular medicines and those on less than 10 medicines but at particular risk of adverse events.[1]
- Identify those patients with frailty using tools that may already be on practice systems, e.g. electronic frailty index (eFI).[1]
- Develop and implement individualised management plans. Share individualised management plans electronically through the NHS Summary Care Record or by ensuring that the person always has an up-to-date paper copy of their plan at home.[1]

Background

The problems with polypharmacy in the elderly are well recognised. Multimorbidity is a major issue facing current general practice. NICE NG56 defines multimorbidity as follows:[1]

Multimorbidity refers to the presence of two or more long term health conditions, which can include:

- Defined physical and mental health conditions such as diabetes or schizophrenia
- Ongoing conditions such as learning disability
- Symptom complexes such as frailty or chronic pain
- Sensory impairment such as sight or hearing loss
- Alcohol and substance misuse.

Together, multimorbidity and polypharmacy are among the biggest risk factors for reduced quality of life, higher mortality, higher use of unplanned health care, inappropriate medication and adverse drug reactions (ADRs), leading to patient harm.[2] Those with multimorbidity frequently receive care from primary care and multiple specialists, who may not be communicating effectively with each other.[2] These challenges are compounded by the need to manage the shared treatment of multiple

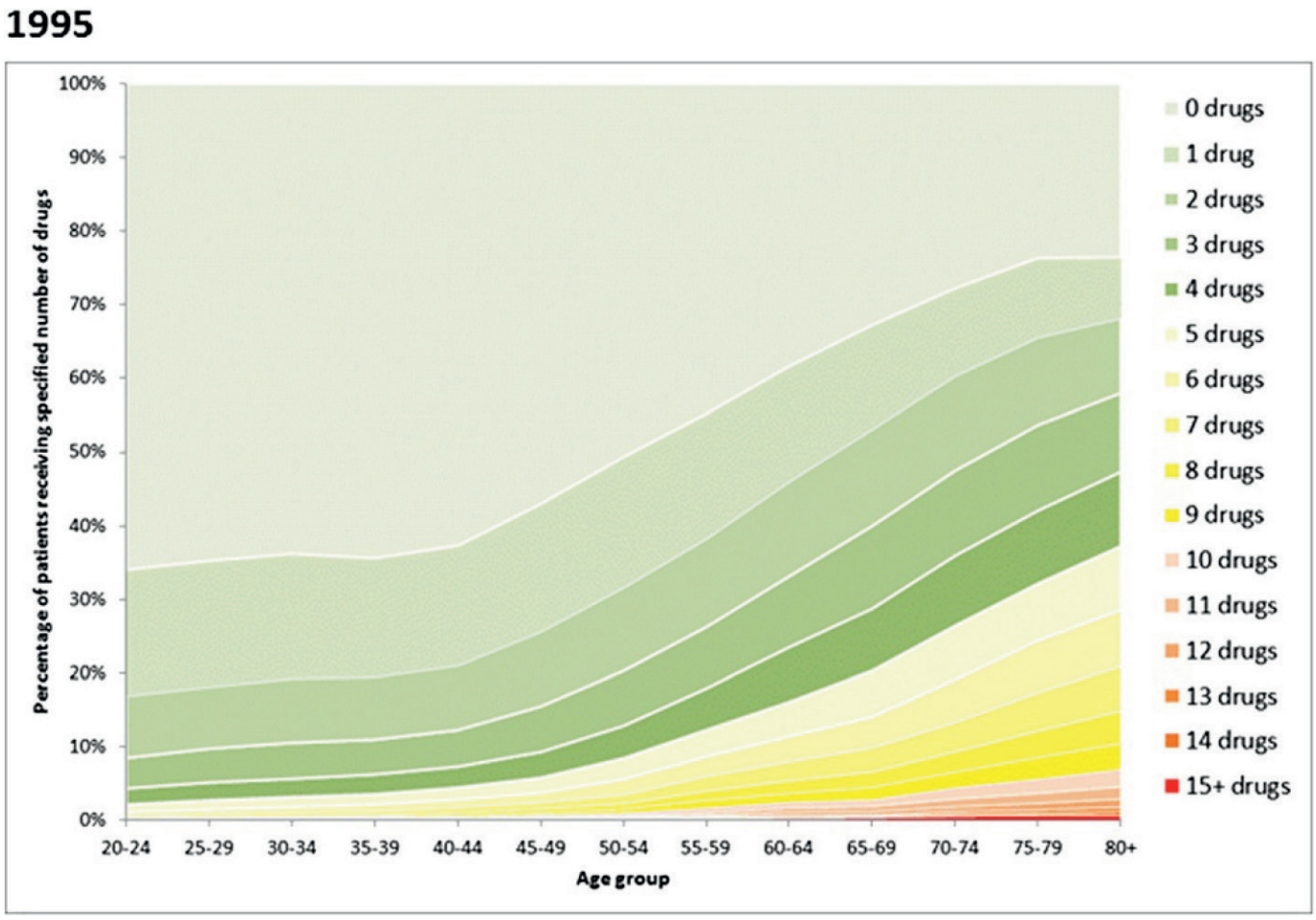
conditions by several prescribers from different specialties. Guidelines are usually disease-specific without evidence of effects on the older, frailer, multimorbid patient. The interdisciplinary effort in the treatment of patients with multimorbidity needs to improve to ensure that clinicans are treating patients holistically and not just the individual conditions of the multimorbid patient, according to single-disease guidelines. Prescribers need to be equipped to identify instances where deprescribing is appropriate and then make the necessary changes to pharmacotherapy.[3]

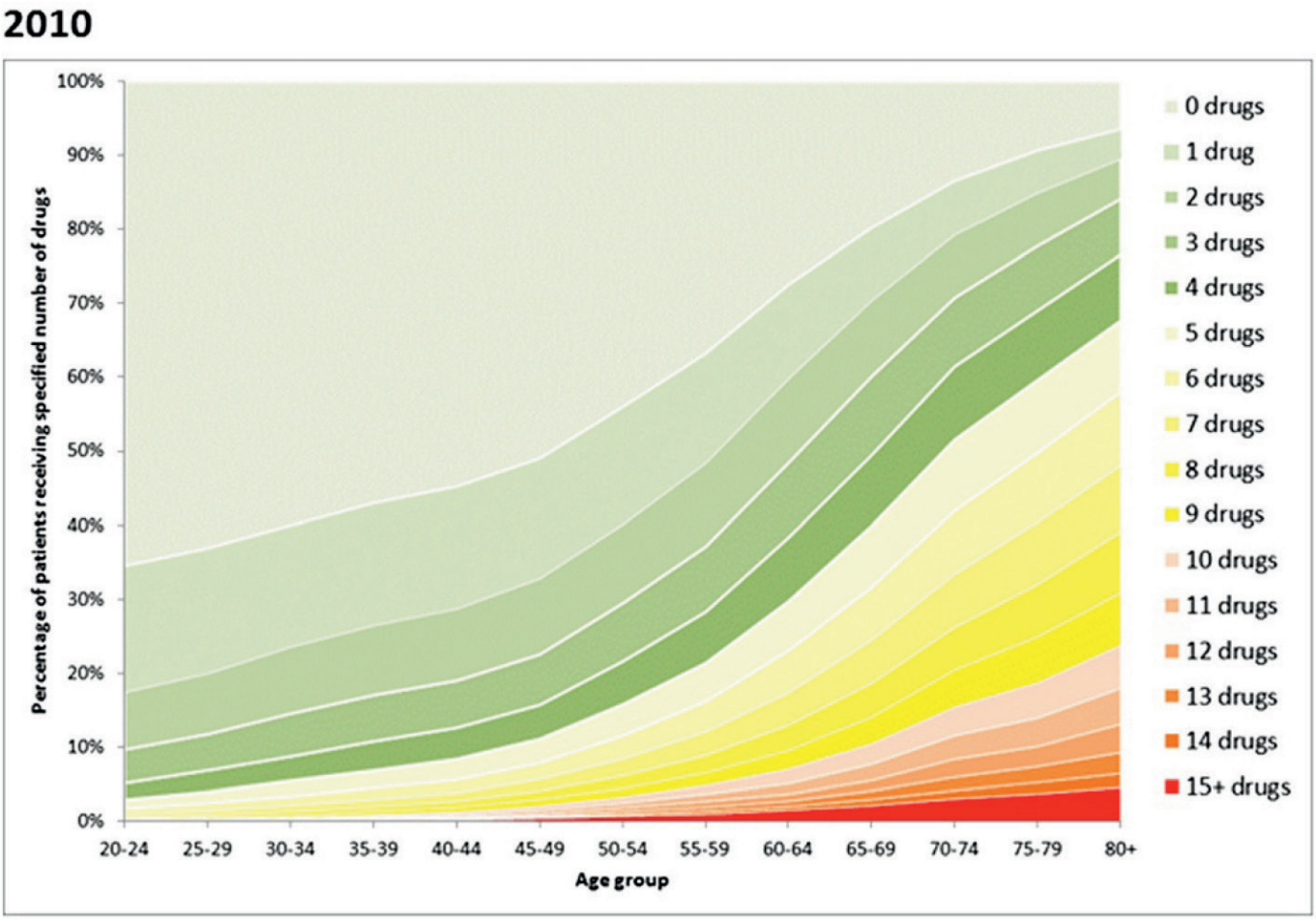
Prevalence

Around one in four of the UK adult population have two or more long term conditions (LTCs), often known as 'multimorbidity' and this rises to two thirds in people aged 65 years or over.[4]

Figure 1 demonstrates variation in prescribing in Tayside of 310,000 patients, where between 1995 and 2010, the proportion of adults dispensed ≥5 drugs doubled to 20.8%, and the proportion dispensed ≥10 tripled to 5.8% (which increased with age).[5]

Figure 1: Variation in drug usage in 1995 and 2010[5]

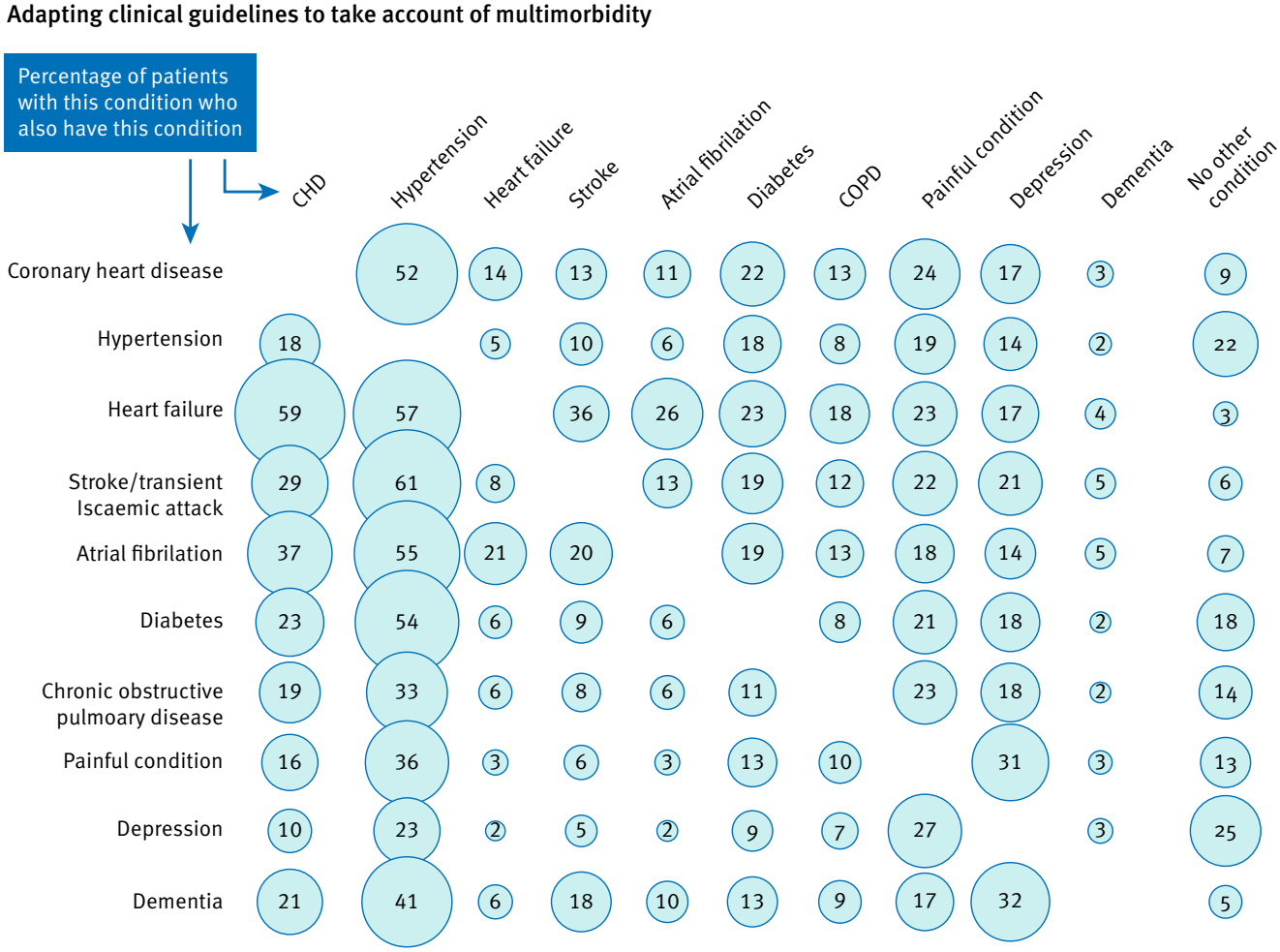




Analysis conducted by the Royal College of Practitioners has shown that by the year 2025 the number of people living with one or more serious long term conditions in the UK will increase by nearly one million, rising from 8.2 million to 9.1 million. Combined with the current ageing population, the increased prevalence of long term conditions is having a significant impact on health and social care, and could cost general practice an extra £1.2 billion a year over the next decade.[6]

Estimates of the proportion of the population with multimorbidity vary according to the datasets used and how many different conditions these include. A retrospective study of approximately 100,000 adult patients across 182 practices in England, identified that 16% of patients had multimorbidity, defined as having two or more of the chronic diseases in the Quality and Outcomes Framework, but 58% had multimorbidity when a wider list of 114 chronic conditions was considered.[7] In Scotland, extracted data on 40 morbidities from a database of approximately 1.75 million people, found that 23.2% of the population studied were living with multiple long term conditions.[8] Figure 2 illustrates percentage of patients that have co-existing morbidities.[2] A secondary analysis of the same study found that only 10 conditions accounted for the five most prevalent conditions at different ages in patients with multimorbidity across the life-course; in every ten-year age group pain and depression featured in the top five conditions.[9]

Figure 2. Adapting clinical guidelines to take account of multi-morbidity; percentage of patients that have co-existing conditions.[2]



Although more common in older people, multimorbidity can also occur in younger people. People living in the most deprived areas have double the rate of multimorbidity in middle age than those living in the most affluent areas. This means they develop multimorbidity 10-15 years before their more affluent peers. Rates of multimorbidity in older people are largely due to higher rates of physical conditions. However, in the less affluent, multimorbidity due to combinations of physical and mental health conditions is common.[1]

The interaction of long term physical conditions and long term mental health conditions poses particular challenges for the health care system. Whilst a patient may develop depression as a result of living with a long term physical illness, depression itself can reduce a patient's ability to manage a physical condition. Research has demonstrated that 23% of patients with one chronic condition reported depression, compared to 40% of those with five or more conditions. It is therefore paramount that mental health is recognised as being of equal importance to physical health when treating multimorbidity. Research demonstrates that where depression and a long term physical condition were treated collaboratively, rates of depression were lower than when they were treated separately. Dementia can make management of a physical condition especially challenging due to forgetfulness or confusion, and if medication is not taken a patient's physical condition may decline.[10]

Limitations of guidelines when treating patients with multimorbidity

Clinicians express uncertainty about the balance of benefit and harm of treatments in people with multimorbidity because evidence is largely based on trials of interventions for single conditions, from which people with multimorbidity are often excluded.[1,2,11] Guidelines derived from such trials may lead to burdensome levels of treatment or unfeasible patterns of healthcare use.[2]

Care for people with multimorbidity is complicated because different conditions and their treatments often interact in complex ways. Despite this, the delivery of care for people with multiple long term conditions is still often built around the individual conditions, rather than the person as a whole. As a result, care is often fragmented and may not consider the combined impact of the conditions and their treatments on a person's quality of life. Patients with multiple long term conditions are often excluded from single disease clinical research, in order to ensure there are no influencing external factors. This method of research aims to understand how to treat an 'average uncomplicated patient'. As a result, there is little evidence base for patients with multiple long term conditions, yet it is often patients with multimorbidity to whom the findings of this research are applied.

It is important to consider the following factors for those with multimorbidity:[2]

- Guidelines on single health conditions may not be applicable.
- Aggressive management of risk factors for future disease is often a major treatment burden and can be inappropriate.
- Assess whether patients may benefit from an approach to care that takes account of their multimorbidity.
- Consider all conditions and treatments simultaneously.
- Easier access to data about the absolute benefit of commonly prescribed treatments is needed.

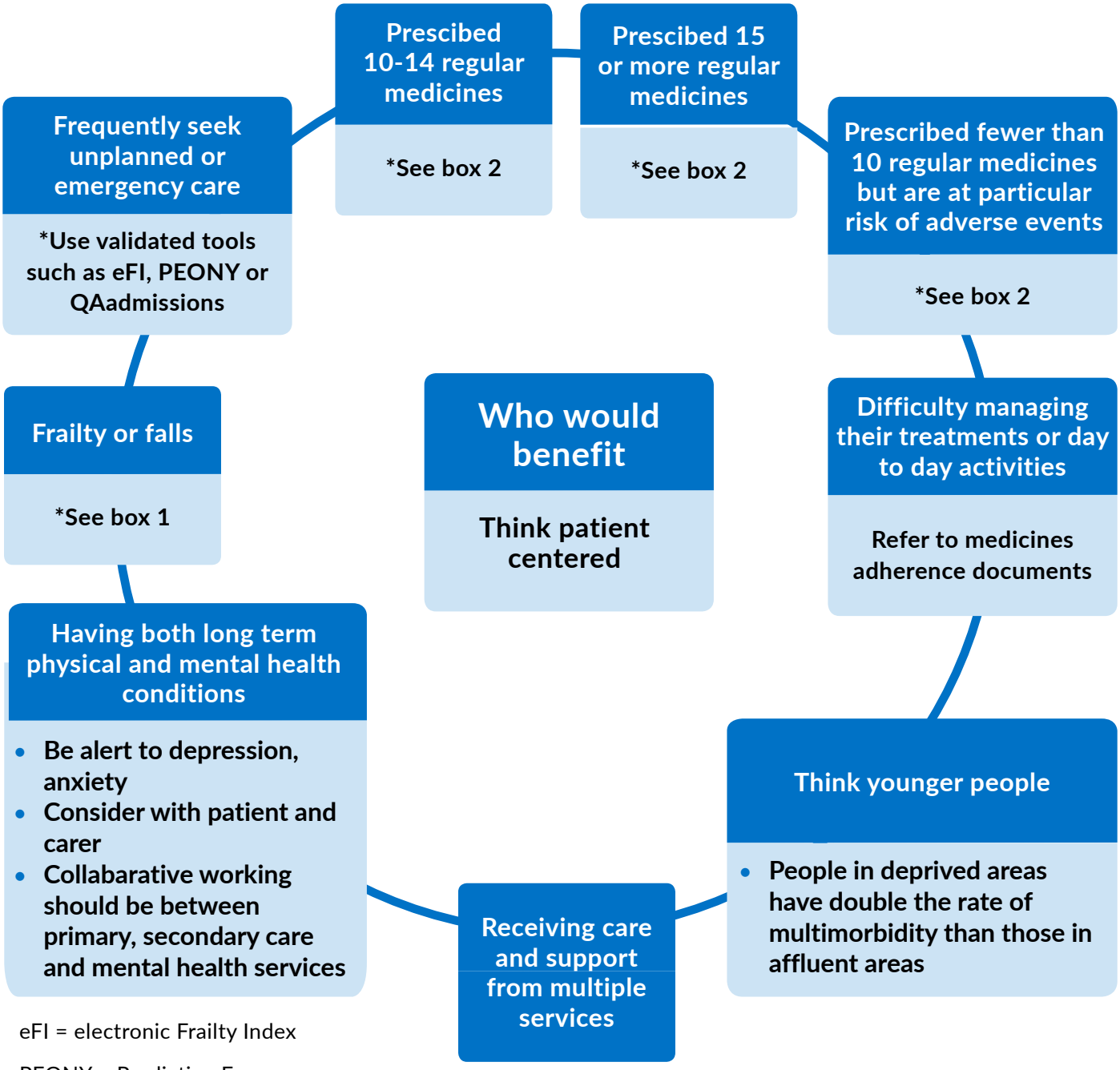
Tools to help with deprescribing

Refer to PrescQIPP *B136. Polypharmacy and Deprescribing* and the polypharmacy and deprescribing webkit for complete list and further information: https://www.prescqipp.info/polypharmacy-deprescribing-webkit

There are a number of resources that help clinicians identify specific medications that may have the potential to be inappropriate:

- PrescQIPP Improving Medicines and Polypharmacy Appropriateness Clinical Tool (IMPACT).
- Beers criteria.
- Screening Tool of Older Persons' potentially inappropriate prescriptions STOPP/START.
- PINCER.
- No TEARS.
- NHS Scotland Polypharmacy Toolkit.
- A patient centred approach to polypharmacy.
- MedStopper is a new Canadian on-line tool which lists a patient's drug-indication and ranks from potentially most stoppable to potentially least stoppable, with concise displays of the rationale (and evidence if available) for their ranking.
- NICE patient decision aids.

Figure 3. Actions to improve outcomes



eFI = electronic Frailty Index

PEONY = Predicting Emergency admissions Over the NExt Year

Box 1: Assessment of frailty[1]

Be cautious about assessing frailty in a person who is acutely unwell.

Do not use a physical performance tool to assess frailty in a person who is acutely unwell.

Consider use of the eFI, which is now freely available in SystmOne and EMIS.

Use assessments

- An informal assessment of gait speed (for example, time taken to answer the door, time taken to walk from the waiting room)
- Self-reported health status (that is, 'how would you rate your health status on a scale from 0 to 10?', with scores of 6 or less indicating frailty)
- Formal assessment of gait speed, with more than five seconds to walk four metres indicating frailty.
- The PRISMA-7 questionnaire, with scores of 3 and above indicating frailty.

Box 2: Reviewing medicines

Refer to PrescQIPP polypharmacy and deprescribing resources

- When reviewing medicines and other treatments, use the database of treatment effects included in the NICE Multimorbidity Guideline NG56 to find information on the effectiveness of treatments https://www.nice.org.uk/guidance/ng56/resources
- Consider using a screening tool (for example, IMPACT or the STOPP/START tool in older people) to identify medicine-related safety concerns and medicines the person might benefit from but is not currently taking.
- When optimising treatment, think about any medicines or non-pharmacological treatments that might be started as well as those that might be stopped.
- Ask the person if treatments intended to relieve symptoms are providing benefits or causing harms. If the person is unsure of benefit or is experiencing harms from a treatment discuss reducing or stopping the treatment
- Plan a review to monitor effects of any changes made and decide whether any further changes to treatments are needed (including restarting a treatment).
- Take into account the possibility of lower overall benefit of continuing treatments that aim to offer prognostic benefit, particularly in people with limited life expectancy or frailty.
- Discuss with people who have multimorbidity and limited life expectancy or frailty whether they wish to continue treatments recommended in guidance on single health conditions which may offer them limited overall benefit.
- Discuss any changes to treatments that aim to offer prognostic benefit with the person, taking into account their views on the likely benefits and harms from individual treatments and what is important to them in terms of personal goals, values and priorities.
- NICE state: Tell a person who has been taking bisphosphonate for osteoporosis for at least three years that there is no consistent evidence of further benefit from continuing bisphosphonate for another three years or of harms from stopping bisphosphonate after three years of treatment. Discuss stopping bisphosphonate after three years and include patient choice, fracture risk and life expectancy in the discussion. Note that this is the only specific drug class recommendation made by NICE. As there is much less evidence about the balance of benefit and harm over longer periods of treatment (e.g. treatments for hypertension or hyperglycaemia).
- Note the National Osteoporosis guideline group recommend a treatment period of five years before considering discontinuation of treatment.[12] The duration of treatment should be assessed on an individual patient basis. See the bisphosphonate deprescribing algorithm for further guidance https://www.prescqipp.info/resources/send/356-polypharmacy-practical-guide-to-deprescribing/3417-attachment-4-bisphosphonates-for-osteoporosis-secondary-prevention-deprescribing-algorithm
- NICE has added to its research recommendations that one or more large, well-designed trials of stopping preventive medicine in people with multimorbidity would be of value in defined patient groups in the community.

Figure 4 below tabulates the principles of an approach to care for multimorbidity.

Actions to improve outcomes:

- Step 1: Consider an approach to care if the patient requests it, opportunistically or proactively using electronic health records. Identify people who would benefit.
- Step 2: People defined in Figure 1 may benefit the most.[1]
  - » Adopt a patient centred approach by asking the patient “What matters to them?”.
  - » Offer extended consultations to improve assessment and planning.[1,6]

- Step 3: Discuss the purpose of an approach to care that takes account of morbidity.
- Step 4: Establish disease and treatment burden.
- Step 5: Establish patient goals, values and priorities.
- Step 6: Review medicines and other treatments taking into account evidence of likely benefits and harms for the individual patient and outcomes important to the person.
- Step 7: Agree an individualised management plan. Refer to attachment 1: Individualised management plan.

Figure 4: Principles of an approach to care[1]

PRINCIPLES OF AN APPROACH TO CARE TO IMPROVE QUALITY OF LIFE

- Establish disease and treatment burden.
- Establish patient goals, values and priorities.
- Review medicines and other treatments taking into account evidence of benefits and likely harm from guidance on single conditions.
- Improve coordination of care across services.
- Agree an individualised management plan.

Establish disease burden by talking to people about how their health problems affect day to day life

Review depression, anxiety and chronic pain

Discuss: Mental health, wellbeing, quality of life

Establish treatment burden

- » Number of healthcare appointments
- » Number and type of medicines
- » Harms from medicines
- » Non-pharmacological treatments, e.g. diets, exercise programmes, psychological treatments, any effects of treatment on mental health and wellbeing.

Establish patient goals values and priorities

Clarify partner, family member and/or carers involvement

Clarify importance of:

- » Maintaining independence.
- » Undertaking paid or voluntary work.
- » Preventing specific adverse events.
- » Reducing harms from medicines.
- » Reducing treatment burden
- » Lengthening life.

Review medicines and other treatments taking into account evidence of benefits and likely harm

Use an appropriate database to find information on effectiveness of treatments, duration of treatment trials, population included in the trials.

Consider a screening tool, e.g. STOPP/START.

Start medicines if appropriate (as well as stopping).

Is treatment providing benefit or causing harms? Review in terms of personal goals, values and priorities. Discuss reducing or stopping treatment. Plan a review to monitor effects of any changes made and decide if further changes in treatment are needed

Discuss continuation of treatment – see guidance on single disease conditions

Discuss changes to treatment taking into effect benefits and harms/what is important in terms of personal goals, values and priorities

Osteoporosis: NICE gives specific recommendations to stop bisphosphonates after three years and include patient choice, fracture risk and life expectance in the discussion.

Agree and document an individualised management plan

Goals and plans for future care (including advanced care planning).

Prioritising healthcare appointments.

Anticipating possible changes to health and wellbeing.

Starting, stopping or changing medicines and non-pharmacological treatments.

Assigning responsibility for coordination of care. Ensure that coordination of care is communicated to all professionals and services involved.

Timing of follow-up and how to access urgent care.

Summary

There is increasing recognition that care for some people with multimorbidity needs reviewing. It is also acknowledged that the there is little evidence base for patients with multiple long term conditions. This project provides guidance on a multi-factorial approach for the management of people with multimorbidity.

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Additional PrescQIPP resources

 Briefing

 Patient letter

Available here: https://www.prescqipp.info/resources/category/429-polypharmacy-multimorbidity

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