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module 258

Home MURs for vulnerable older people

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the **continuing professional development** programme

CPD

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module 258

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Home MURs for vulnerable older people

GOALS AND LEARNING OBJECTIVES

This module aims to improve your knowledge and confidence so that you are able to undertake patient-centred and outcome-focused MURs for older people who live in their own homes. After studying this module, you will be able to describe the different factors that impact on medicines optimisation and outline the practical steps needed for completing a MUR in a patient's home.

KEY FACTS

- The fastest growing sub-group of the UK's ageing population are older people living with frailty
- Many of those who are housebound rely on others for medicines support, which can result in poor engagement by patients with both prescribers and pharmacists
- In frail older people a minor event can trigger major changes in health status
- Frailty is a progressive long-term condition with episodic deteriorations, which poses a major challenge to medicines optimisation
- Those living with frailty are six times more likely to be on 10 drugs
- Polypharmacy increases non-adherence and is the biggest risk factor for adverse drug events (ADEs)
- The aim of care in frail older people is palliation and symptom control rather than aggressive drug treatment
- ADEs are commoner in older people and are implicated in 16.6 per cent of hospital admissions
- Many ADEs remain undiagnosed because they are atypical, vague and non-specific

Introduction & module overview

Older people living with frailty are the fastest growing sub-group of our ageing population. This module looks at medicines use reviews (MURs) undertaken with the patient present in his/her own home (including warden-assisted or sheltered accommodation). The focus is on older people living with frailty because they are the most vulnerable to adverse drug events (ADEs) and will benefit from domiciliary MURs for a number of reasons.

Many are housebound, have difficulties accessing face-to-face pharmaceutical care and rely on others for medicines support, which can result in poor engagement with both prescribers and pharmacists. Multidisciplinary team involvement, frequent hospital visits and care delivery via complex health and social care pathways are normal for this group – but these all increase the risks of ADEs due to potential breakdowns in communication and poor transfer of information during care transitions and handovers. Domiciliary MURs provide an opportunity to:

- Understand what is happening with the patient and their medicines
- Monitor medicines use
- Detect and resolve ADEs.

You can complete this module online at **pharmacymagazine.co.uk** and record your learning outcomes and the impact on your practice in your own **personal and confidential learning log**

Describing how polypharmacy, ADEs and non-adherence impact on patient outcomes, this module demonstrates how pharmacists working with local integrated teams in community settings can undertake individualised interventions to optimise medicines use.

Frailty and associated problems

Frailty has been defined as an age-associated decline in physiological reserve and function across multi-organ systems, leading to increased vulnerability to adverse health outcomes. In frail older people a minor event can trigger major changes in health status from which they may fail to return to their previous level of health. Frailty is a progressive long-term condition with episodic deteriorations. Twenty-five to 50 per cent of people over 85 years are frail and there is a 25 per cent co-existence of frailty with multiple morbidity and disability.

Frail people are at higher risk of hospital admissions, stay longer in hospital and are higher users of health and social care resources. They typically present with falls, immobility, incontinence, delirium and ADEs – known as the 'geriatric giants' or 'frailty syndromes'.

Those living with frailty are three times more likely to be on up to five drugs, six times more likely to be on up to 10 drugs and twice as likely to have been exposed to a high drug burden index. Put another way, an older person who is taking five to nine or 10 or more drugs is one-and-a-half and three-times more likely to be frail compared to those on fewer than five drugs.

Frailty poses a major challenge to medicines optimisation as the associated interconnected health, functional and psycho-social factors affect how patients access, adhere to and respond to medicines (see Figure 1).

Reduced physical functionality may lead to dependence on others for support with medicines use. For example, housebound patients may have reduced muscle strength or poor dexterity, which means they require help to collect and/or administer medicines. This could delay timely access to critical drugs, resulting in hospital admission.

Similarly, cognitive impairment may result in forgetting to take medicines or difficulty mastering and continuing techniques needed to self-administer medicines (e.g. inhalers, insulin or blood glucose monitoring devices). Sensory impairments and swallowing difficulties may present as practical barriers to adherence.

Poor patient engagement and communication between various practitioners prescribing, dispensing or administering medicines can lead to errors, ADEs and non-adherence, especially during transfer of care or handover points.

Polypharmacy, ADEs and non-adherence

Polypharmacy increases non-adherence and is the biggest risk factor for ADEs. It imposes a financial burden on healthcare systems and is implicated in up to 17 per cent of hospital admissions. In addition, polypharmacy and multi-morbidity increase drug-drug/disease interactions. Polypharmacy is multifactorial and understanding the cause can assist with addressing the problem. Contributing factors include:

Reflection exercise 1

Use your PMR to identify two patients well-known to you who are over 80 years of age and take eight or more medicines.

- **List any drug, patient, health, functional or psychosocial factors that you think may increase their risk of ADEs**
- **Can you identify any potential prescribing cascades from the medicines list?**

Evidence-based tools to identify inappropriate prescribing

The STOPP/START tool version 2 2015: This is a validated list of criteria to screen for inappropriate medicines in older people. STOPP lists 80 and START 34 criteria for which medicines could be stopped and started respectively. Little or no clinical assessment of the patient is needed, so it is quick to use in practice.

STOPPFrail 2017: This lists 27 explicit criteria for potentially inappropriate medication use in frail older adults with limited life expectancy. The final decision to stop therapy depends on risks outweighing benefits, if administration or monitoring is challenging, and if adherence is difficult.

Anticholinergic burden/risk scales or tools: These identify drugs with anticholinergic activity. Each is scored from zero for no activity to 3 for high activity. In older people with existing cognitive impairment or dementia, individual drugs with 2 or 3 points should be reviewed and stopped or switched to an alternative. A total drug burden or score of 3 or more is associated with increased risk of death and cognitive impairment. Commonly used drugs with a score of 3 include hyoscine, oxybutynin, amitriptyline and promethazine.

Each tool has its strengths and limitations. None are perfect for every situation. Inevitably, deciding whether a drug is appropriate or not requires the patient's perspective and practitioner's expertise to correctly tailor therapy.

- Multiple long-term conditions and increasing age
- Therapeutic advancements and increased accessibility to prescribed as well as non-prescribed medicines
- Prescribing cascades (where the adverse effect of a drug is mistaken for a new symptom and a second drug is inappropriately prescribed)
- Performance targets driven by clinical guidance
- Multiple prescribers
- Reluctance to stop medicines and poor evidence for withdrawal
- A "pill for every ill" and psychosocial issues
- Patient or carer demand
- Poor patient engagement and communication.

Non-adherence to medicines in older people is multifactorial and, in reality, 'intentional' and 'unintentional' non-adherence often co-exist in the same individual. For example, an older person may be 100 per cent adherent with their analgesics but unable to manipulate their inhalers, forget to take their antibiotics and not willing to take a diuretic for fear of side-effects.

What is important for health professionals is not trying to fit a patient into either category, or even to "get" them to take their medicines, but to engage with them to identify the reasons behind any non-adherence, and give the appropriate information and support to meet the specific needs identified.

ADEs are commoner in older people and are implicated in 16.6 per cent of hospital admissions. Most are dose-related, predictable and preventable. Polypharmacy also means the risk of a drug error post-discharge is up 70 per cent as a result of increased patient vulnerability, poor transfer of information and frequent drug changes.

Many ADEs in older people remain undiagnosed because they are atypical, vague and non-specific (e.g. confusion, unsteadiness, constipation, falls). Asking open questions during patient consultations is essential to identify and resolve these events.

An ADE should be suspected when an older person presents with new symptoms. Common ADEs include gastrointestinal and haematological reactions, falls, delirium and anticholinergic symptoms.

Frail patients living in domiciliary settings may face additional challenges with medicines optimisation compared to robust or fit, older people, such as:

- Over-reliance on telephone consultations and third parties to speak on their behalf
- A home environment with inadequate facilities for medicines storage and keeping medicines within easy reach
- Poor or delayed access to medicines supply, leading to stockpiling and wastage
- Considerable involvement of non-clinical staff including relatives, friends, carers and care workers with managing complex medicines issues
- Aligning carer visits with administration times for critical and *prn* medicines
- Complex issues with capacity and consent
- Safeguarding and unintentional overdose.

Managing the problem

Medicines review is a broad term used to describe interventions to examine a patient's medicines with the aim of rationalising and improving their safety and appropriate use. In frail older patients with polypharmacy, it also considers whether any 'deprescribing' – ie. the safe and effective withdrawal of inappropriate medicines – should take place.

A practical step-by-step patient-centred outcome-focused approach to optimising medicines use in older people was proposed by Barnett *et al* (see Figure 2). Each step provides practical support for pharmacy practitioners to embed medicines optimisation into everyday practice. It provides points to consider, actions to take and questions to ask, allowing the practitioner to prioritise the issues based on their importance to the patient, risks, benefits and current evidence.

Pre-visit preparation for a home MUR

A number of preparatory steps are required before undertaking a domiciliary medication review or MUR.

Patients and their medicines lists

As well as the PMR providing a recent 'dispensed medicines' history, community pharmacists now have access to the summary care record (SCR). Any recent discharge summary that has been faxed to the pharmacy is also important.

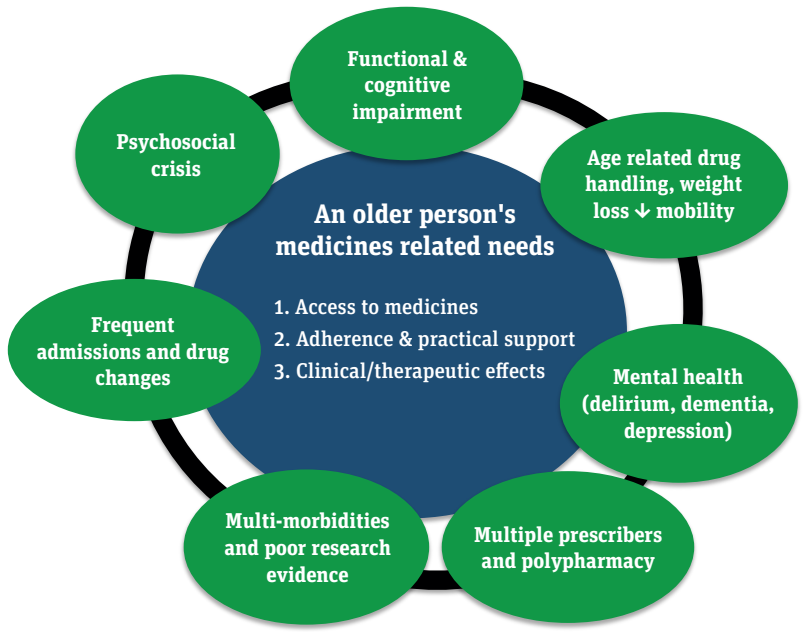
Community pharmacists working with their local GP practice may also have access to recent tests, investigations, consultations and support provided by various community teams, such as district nurses, physiotherapists and dieticians.

Reflection exercise 2

Think about your last face-to-face consultation with a patient about their medicine(s).

- **What percentage of the conversation was you "giving information", "advising" or "telling"?**
- **Did you find out about their experiences and how they felt about taking the medicine(s)?**
- **What questions might you ask next time to get this information?**

Figure 1: Impact of frailty on medicines use



Source: Rosenbloom EK and Goldstein FR. The development of trigger questions to support the case finding of people with unmet medicines-management needs. IJPP 15 (2007): 21

Refresh therapeutic knowledge where needed

The patient's list of medicines may indicate that you need a quick therapeutic update or refresher on the drugs and conditions concerned. The BNF and NICE Clinical Knowledge Summaries (CKS) are useful resources.

Get to know a few tools for identifying potentially inappropriate drugs

These tools may be new to you and appear complicated at first – but they do become quicker to use with practise and experience. They provide an evidence base for any suggestions you make to prescribers about changes to a patient's medicines. The panel on 'Evidence-based tools' on the previous page provides more details.

Safety

You will need a DBS check, which can take a while to obtain. Practical information about the following can all be obtained from the referrer or patient:

- Safety
- Particular risks (dealing with mental health patients, capacity, consent, safeguarding issues/policies)
- Patient preferences (visit times, communication barriers, who can be present to support them)
- Who else is involved with medicines (relatives, care workers, district nurses).

Have a clear plan for communicating after the domiciliary visit

Community pharmacy domiciliary MURs are already being commissioned as a local service in several areas and are under consideration in others. GP practice/primary care pharmacists are now conducting clinical medication reviews for frail older patients and networking with community pharmacists in order to refer patients for a MUR to provide practical support with using their medicines.

CPD

Next month's CPD module...

Bipolar disorder: Causes, signs, symptoms and therapeutic management

Learning scenario 1

Josephine Summers is 79 years old and lives alone. She has a past medical history of hypertension, postural hypotension, anxiety and type 2 diabetes. She is very active and is out for most of the day, returning home late evenings, but has begun to show signs of frailty. Josephine had been self-administering her medicines until a few weeks ago when she was referred by the GP to the district nursing team due to high HbA1c as well as fluctuating hypo- and hyperglycaemia. Her insulin was changed from Humulin I *bd* to Lantus *od* and the district nurses have been visiting every morning to support her with the changeover, but report that Ms Summers has not quite mastered the administration technique and her blood sugar levels are still fluctuating. They are also concerned that she is not taking her oral medicines as prescribed (although Ms Summers says she is) and insist she waits for the nurse's morning visit so she can be supervised. Ms Summers says this limits her activities and lifestyle. Which statement about the medicines-related problems in this patient is **incorrect?**

a. The patient is non-adherent because she has dementia
b. The medicines schedule does not fit her life-style and is contributing to non-adherence
c. Polypharmacy and increasing frailty increase her vulnerability to adverse drug events
d. Difficulty following new instructions is contributing to fluctuations in blood glucose levels

During the domiciliary visit

Patient-centred consultations need a coaching style to negotiate a shared agenda and identify pharmaceutical needs in the context of the patient's overall goals and desired outcomes. The 4Es (**E**xplore, **E**xplain, **E**ducate, **E**nable) can be used as a simple structure for framing consultations.

Identifying, assessing needs and care planning

The patient, rather than just the list of drugs, should be assessed at this stage to identify their needs in the context of their overall care goals. Generally, the aim of care in frail older people is palliation and symptom control rather than aggressive drug treatment (which may lead to ADEs without tangible benefits).

This part of the process includes:

- Medicines reconciliation using the patient's PMR and any OTC/non-prescribed medicines
- Exploration of adherence; matching indications to medicines
- Exploring therapeutic successes and failures.

The patient's perception of benefit from medicines is key, particularly for asymptomatic disease. New symptoms should be considered in light of recently prescribed medicines to prevent ADEs from a prescribing cascade.

Identifying risks and benefits

Identifying medication regime risks and benefits in an individual involves exploring the appropriateness of each drug in the context of the information gleaned from the steps above. Pharmacists offer relevant information and advice and negotiate 'trade-offs' with patients, so that each drug (formulation, dose, frequency) is individualised to suit the patient's morbidity, circumstance, clinical reality, social situation, preferences and ability to comply. For example, a smaller dose of an opioid analgesic that just allows the patient to mobilise in the house may be traded off for better pain control to avoid daytime drowsiness so they can be more alert during the day.

Learning scenario 2

Ms Summers tells you that all she wants is to be left alone to manage her medicines and get her blood sugar levels back to normal. Initially, she played down forgetting to take her medicines but later admitted that she stopped taking the water tablets (furosemide) a long time ago because of urine frequency and was not too keen on taking the evening and night-time medicines. She said she felt overwhelmed by taking so many medicines and was keen to know why and how long she needs to take them for. Which of the following conversations does NOT focus on Ms Summers' needs?

a. Exploring the reasons why she feels overwhelmed taking her medicines
b. Explaining in lay terms the risks and benefits of her diabetic medicines in relation to her blood sugar levels
c. Suggesting that she can stop by the pharmacy in the morning to demonstrate insulin administration technique until she is confident on her own
d. Suggesting changing to a MDS with an alarm reminder

Answers on page vi

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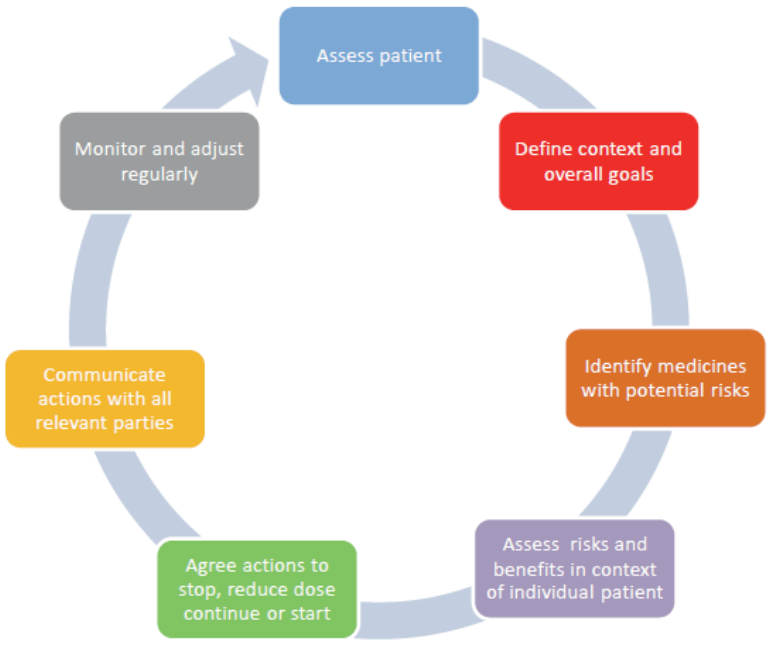
Just click on the 'Professional Information & Articles' button within Pharmacy KnowledgeBase and search by therapy area. Please call the Cegedim Rx helpdesk on **0844 630 2002** for further information.

This module is also online at **pharmacymagazine.co.uk**

Figure 2: A patient-centred approach to managing polypharmacy in practice



Source: N Barnett, L Oboh, K Smith. NHS Specialist Pharmacy Service, 2015

Agreeing interventions and a care/support plan

For each drug, consider whether it needs to be:

- Continued
- Watched
- Reduced/amended (dose, frequency, formulation)
- Discontinued.

Managing time

Managing the time in a domiciliary MUR can be a challenge. Issues community pharmacists have experienced include:

- Patients keen to engage in lengthy conversations
- Trying not to get too deeply involved with the patient's current problems
- Keeping the patient focused on medication issues
- Communication issues (e.g. with a stroke patient).

Post-visit

Communication, referral, monitoring and follow-up

Following the visit, with the patient's consent the MUR feedback form, including any recommendations regarding drug changes, should be sent back by the pharmacist to the GP. Provision should be made for ongoing medicines reviews because one-off isolated reviews, whilst they have their merits, do not really improve clinical outcomes or quality of life in the context of the dynamic needs of frail, older people.

- ***References available on request from the Editor***

Useful resources

- **Polypharmacy guidance for frail older people 2015.** NHS Scotland. This is a useful guide with sections that include a summary on frailty and medicines, a seven-step process for medication review with worked examples of case studies, information to consider when prescribing various drug classes and a drug effectiveness summary table using NNTs. **sehd.scot.nhs.uk/publications/DC20150415polypharmacy.pdf**

- **Polypharmacy, oligopharmacy and deprescribing: resources to support local delivery**. NHS Specialist Pharmacy Services. **sps.nhs.uk/articles/polypharmacy-oligopharmacy-deprescribing-resources-to-support-local-delivery**

Answers: learning scenario 1

a. **The patient is non-adherent because she has dementia**
INCORRECT. Although most patients with dementia are forgetful, not all are non-adherent with medicines and this cannot be assumed with this patient.

b. **The medicines schedule does not fit her lifestyle and is contributing to her non-adherence**
CORRECT. This patient comes home in the late evening, so she may not be taking her evening medicines as a result.

c. **Polypharmacy and increasing frailty increase her vulnerability to adverse drug events**
CORRECT. Taking four or more medicines increases the risk of falls and the cognitive impairment/postural hypotension associated with frailty make her more vulnerable to ADEs.

d. **Difficulty following new instructions is contributing to fluctuations in blood glucose levels**
CORRECT. The patient is finding it difficult to master using the newly prescribed Lantus insulin, so dosing may not be consistent.

Answers: learning scenario 2

a. **Exploring the reasons why she feels overwhelmed by taking her medicines**
INCORRECT. Understanding the patient's perspective or fears about taking her medicines will allow the right information and education to be provided to aid her decision-making.

b. **Explaining in lay terms the risks and benefits of her diabetic medicines in relation to her blood sugar levels**
INCORRECT. She mentioned having normal blood sugar levels was a priority, so understanding the role her medicines play will help her to make an informed choice about taking them.

c. **Suggesting that she can stop by the pharmacy in the morning to demonstrate her insulin administration technique until she is confident on her own**
INCORRECT. This may offer more choice and control to her than staying at home waiting for the nurse's visit. Also, older people learn better through practise.

d. **Suggesting changing to a MDS with an alarm reminder**
CORRECT. The new alarmed MDS may remind her to take the evening and night-time medicines, but will not solve the problem of her *choosing* not to take all her medicines.