

# Ensuring Patient Safety in Older Adult Prescribing



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Slides adapted from Lilly Oboh, Consultant Pharmacist in Older People

## Learning Outcomes

- Issues faced when prescribing
- Prescribing in older people and considerations
- Case studies
- How to manage polypharmacy
- Considerations for deprescribing
- Tools and strategies to manage polypharmacy
- Questions



# First steps

- What medicines is your patient already prescribed?
- OTC
- Hospital prescribed medicines

## Medicines reconciliation<sup>1</sup>:

- Supports your prescribing decisions and the most appropriate medicines to prescribe
- 3 sources
- Access to records across the NHS

# Structured medication review

Classification: Official

Publishing approval reference: PAR0127



Network Contract Directed Enhanced  
Service

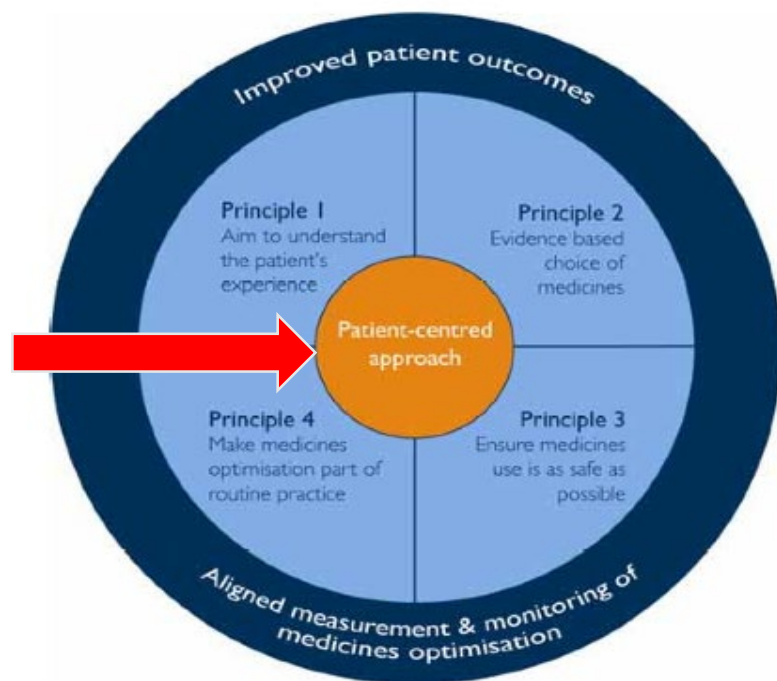
Structured medication  
reviews and medicines  
optimisation: guidance

GP Practice Pharmacists

Primary care Network  
(PCN) Pharmacists

# Medicines Optimisation

**Outcome focused** approach to **safe** and **effective** use of medicines that takes into account the **patient's values, perception** and **experience** of taking their medicines



- **Important Outcomes for adults<sup>4</sup>**

- - Improved quality of life
- - Making a positive contribution
- - Improved health and emotional wellbeing
- - Personal Dignity
- - Control and choice
- - Economic wellbeing
- - Freedom from discrimination

- *Independence Well-being and Choice 2005, Our health, our care, our say 2006, Strong and Prosperous Communities 2006*

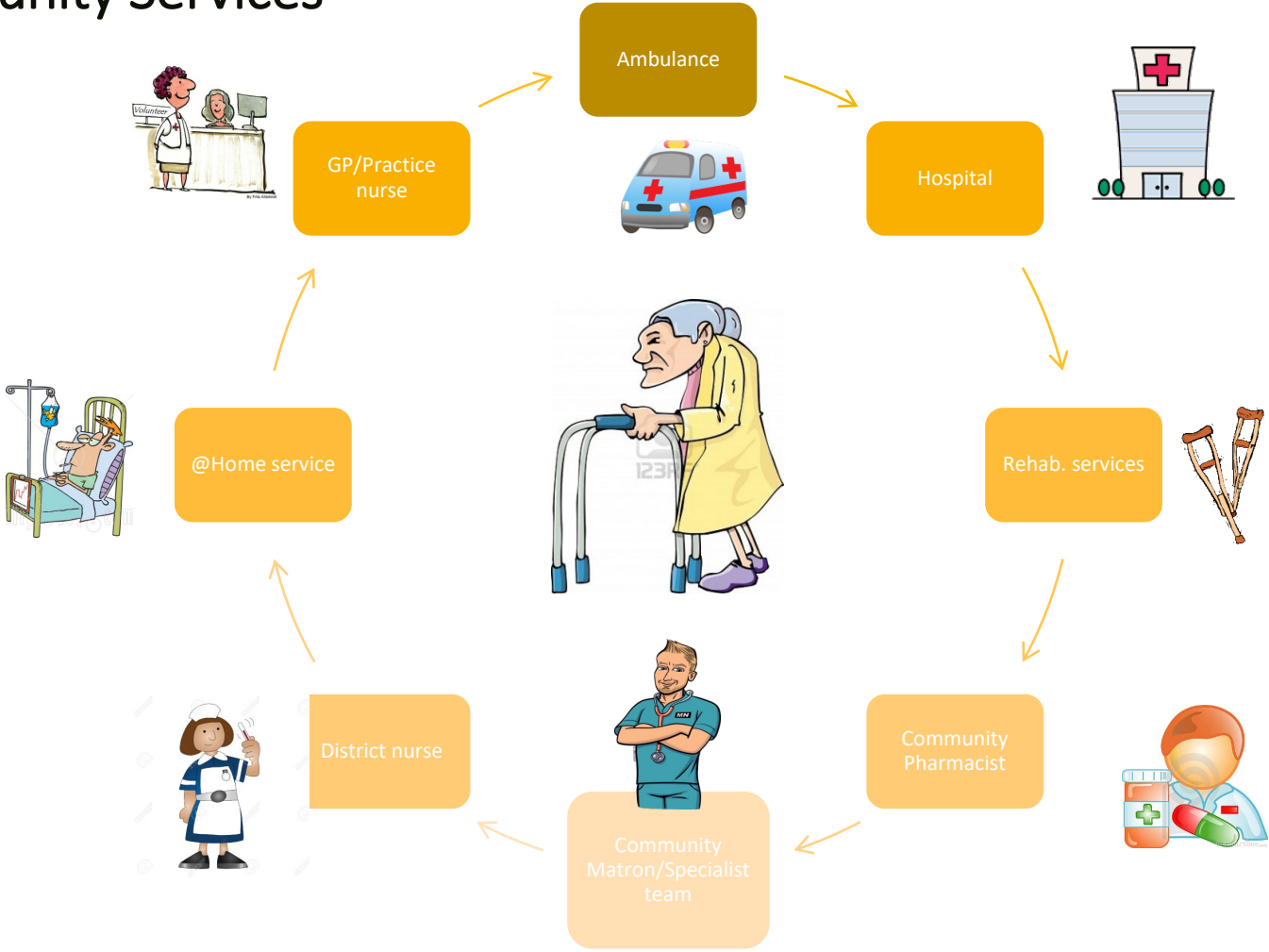
# British National Formulary (BNF)

## Medicines guidance

Guidance on prescribing	Prescription writing	Emergency supply of medicines
Controlled drugs and drug dependence	Adverse reactions to drugs	Guidance on intravenous infusions
Medicines optimisation	Antimicrobial stewardship	Prescribing in children
Prescribing in hepatic impairment	Prescribing in renal impairment	Prescribing in pregnancy
Prescribing in breast-feeding	Prescribing in palliative care	Prescribing in the elderly
Prescribing in dental practice	Drugs and sport	Index of manufacturers
Special-order manufacturers	Life support algorithm (image)	Non-medical prescribing

<https://bnf.nice.org.uk/guidance/>

# Community Services



# Case study 1- example

- 85 year old male patient
- Nil POC
- Lives alone
- Degree of cognitive impairment
- MOCA 15/30
- PMH-CABG/MI, previous vasculitis, renal impairment, HFrEF, COPD

**Main concerns?**



# Medications

- Dosette boxes – TDS
- Co-trimoxazole 480mg OM
- Bisoprolol 10mg OM
- Aspirin disp. 75mg OM
- Furosemide 40mg OM
- Sodium bicarbonate 500mg TDS
- Atorvastatin 80mg ON
- Inhalers/Nebulisers – tiotropium respimat, salbutamol inhaler and fostair nexthaler, salbutamol 5mg nebuliser PRN

## What to do?

# What`s important to the patient?

- Not his medications
- Experiencing SOB all day- in the context of COPD and HF

## **Main issue:**

- Medications ‘make no difference to me, I have no pain’
- Following an agreed plan and confirming the patient`s understanding of his medications in relation to his multi-morbidities
- Reduced pill burden
- Hard of hearing-cannot hear over the telephone

# Patient Outcome

- Stopped sodium bicarbonate and co-trimoxazole- started 2018 for PCP prophylaxis post IV cyclophosphamide treatment for vasculitis
- Reduced atorvastatin from 80mg ON to 20mg OM, last TC 4.3mmol/L
- All medications changed to morning only in dosette box
- Community pharmacy to deliver new dosette boxes

## •Positive effects:

- Reduced polypharmacy
- Patient more likely to adhere as only morning medications and fewer of them
- Patient more accepting of taking fewer medicines

## Case study 2- example

- 86 years, female, AD, main carer: daughter
- Main issue: restless/night time waking due to dementia

MEDICATION	INDICATION	COMMENTS	ADHERENT?	OUTCOME
<b>FERROUS FUMARATE 210MG</b>	Low Hb 102 Nov. 2019	Caused constipation, refused to take	No	Daughter has stopped
<b>MEMANTINE 10MG ON AND DONEPEZIL 10MG ON</b>	Dementia	Caused nausea and diarrhoea, refused to take	No	As above
<b>ATORVASTATIN 20MG ON</b>	Last TC 5.6 Nov. 2019, weight 43kg Feb. 2020	Refuses	No	As above
<b>FOLIC ACID 5MG OD</b>	Last folate 2.3 Nov. 2019	Refuses	No	As above
<b>PROMETHAZINE 10MG BD</b>	Restless at night	Daughter places in decaff. coffee	Yes	Stopped by CMHT

# Case study 2- Actions?

## **Things to consider?**

- Daughter crushing promethazine and placing in decaff. coffee
- covert administration
- patient does not have capacity
- only drinks decaffeinated coffee

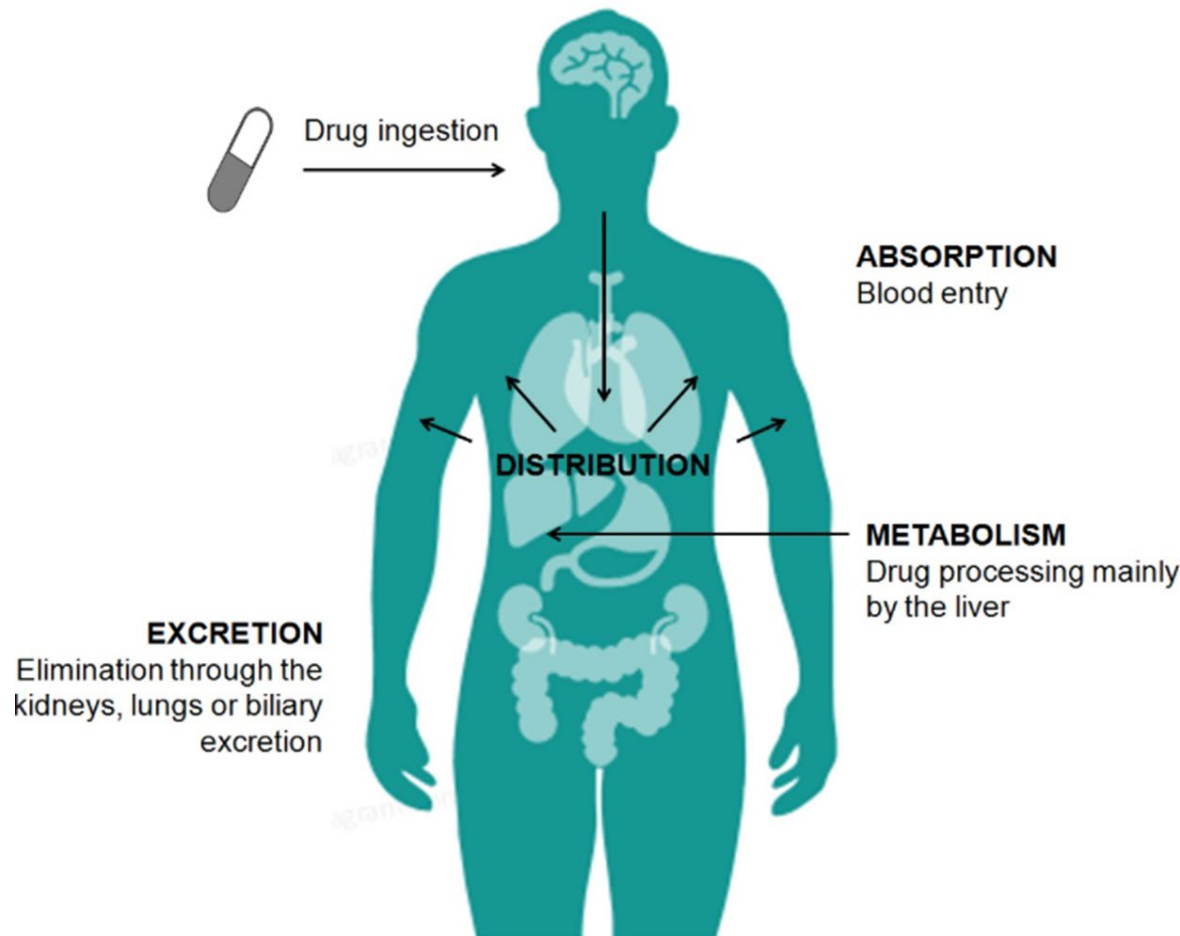
## **Solutions:**

1. community mental health team (CMHT) referral
2. clinical review by CMHT
3. best interest meeting: daughter, CMHT, Pharmacist, GP

## Case study 2- Outcome

- CMHT review
- trialled trazadone 50mg ON- ineffective
- best interests meeting decision made to trial melatonin MR 2mg evening- crushed and added to tepid decaff. coffee
- next commenced on mirtazapine 7.5mg ON orodispersible in decaff. coffee
- no simple solutions
- Main focus for patient and daughter- improved sleep, less night time waking

# Pharmacokinetics: How does the body handle the drug?



Think about your patient factors:

- age
- weight
- GI surgery
- renal impairment
- liver impairment



# Pharmacodynamics: How the drug affects the body

- Increased sensitivity to CNS medications-falls, drowsiness, confusion
- Anticholinergic effects (AEC)
- Diuretic effects-increased urinary frequency, electrolyte imbalances, hypotension/postural
- Opioid effects- constipation, resp. depression, dependence (MHRA, 2020, opioids: risk of dependence and addiction)

**Consider potential negative effects the medication will have on your patient**



# National overprescribing review 2021



Department  
of Health &  
Social Care

-WHO defines as four or more medicines

-Academia five or more

-NHS Scotland uses 10

-GP practice data based on NHS BSA polypharmacy definitions: 8

-Overprescribing review defines as polypharmacy at both 5+ and 8+

**Good for you, good for us, good for everybody**

**A plan to reduce overprescribing to make patient care better and safer, support the NHS, and reduce carbon emissions**

Published 22 September 2021

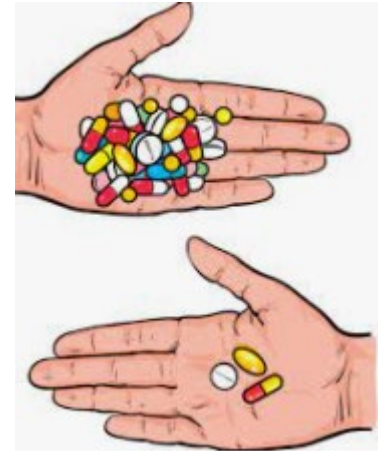
# Adverse drug effects

- Approx. 6.5% hospital admissions
- Over 65 years up to 20% due to adverse effects
- Over 200 requests for repeat items a day- 2 hrs to review and prescribe<sup>2</sup>

2. Dept. of Health and Social Care, 2021, Good for you, good for us, good for everybody. A plan to reduce overprescribing to make patient care better and safer, support the NHS, and reduce carbon emissions.

# Polypharmacy

- Use of more than 4/5 drugs at the same time
- Use of more drugs than is clinically indicated
- More common with, but not limited to older people
- Can be appropriate



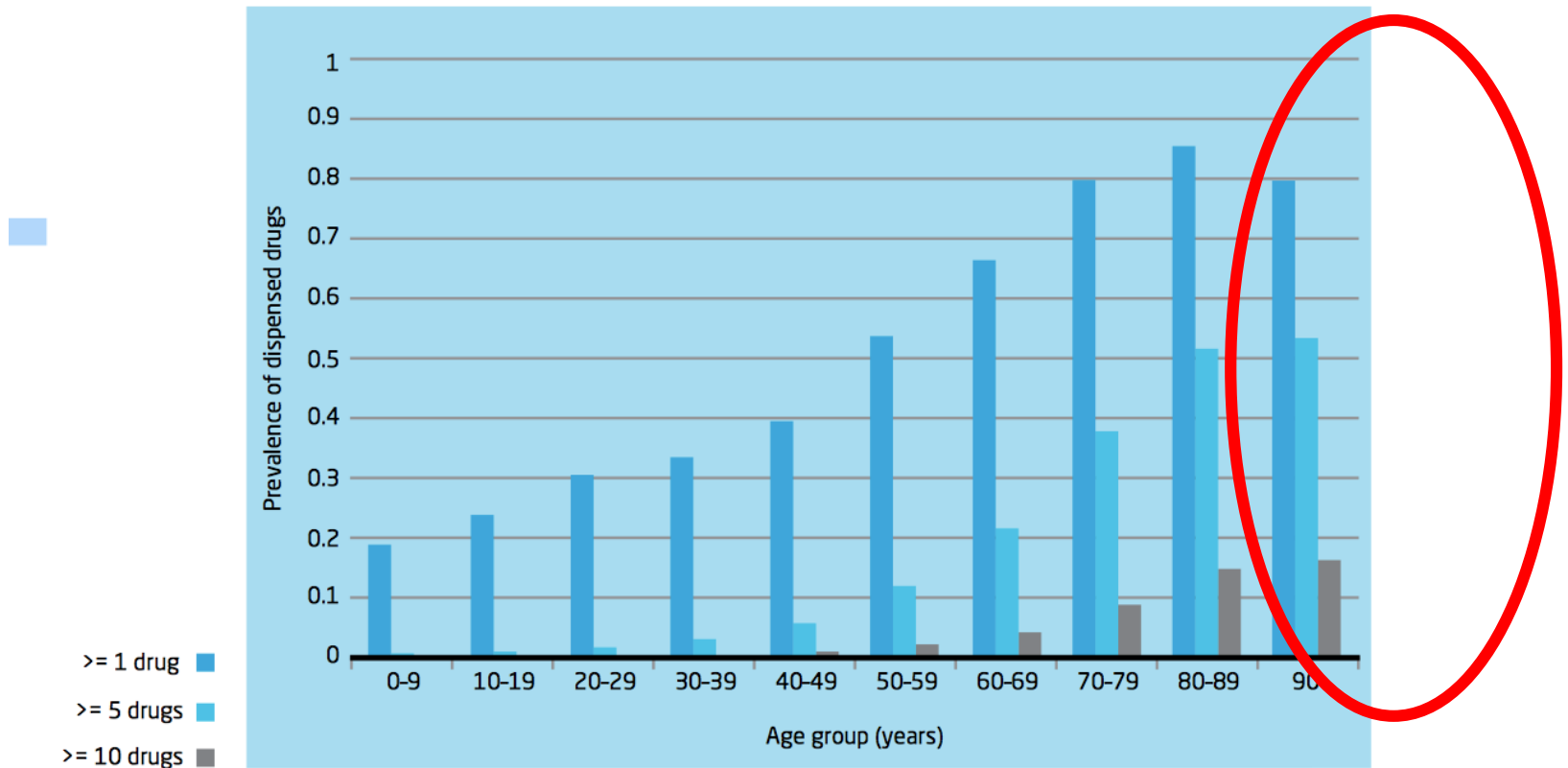
## **Royal Pharmaceutical Society <sup>1</sup>:**

1. Medication no longer clinically indicated
2. Benefit not outweighing the harm
3. Multiple medicines causing harm
4. Practically no longer manageable/causing harm/distress

1.RPS polypharmacy: getting our medicines right: <https://www.rpharms.com/recognition/setting-professional-standards/polypharmacy-getting-our-medicines-right#background>

# Number of meds. vs. age

Figure 4 Polypharmacy, Sweden, 2005 to 2008



Source: Hovstadius *et al.*, (2010b)

# Reasons for Polypharmacy?

Multiple morbidities

Increased longevity

Advancements in drug therapy and preventative strategies

↑ Accessibility to medicines e.g. non prescription drugs

NHS guidance and targets e.g. QOF, NICE quality standards

Reluctance to discontinue drugs

Mistaking ageing for disease/inappropriate response to non-medical problems





# Polypharmacy drivers

**Increase  
Prescribing**

**Hinder  
Deprescribing**

- Multiple long term conditions
- Increasing age
- Therapeutic advancements and new drugs
- Increased accessibility to medicines
- NHS guidance and targets ⇒ QOF, NICE quality standards
- Multiple prescribers
- A “pill for every ill” and psychosocial issues
- Poor therapeutic goal setting
- Patient or carer demand
- Prescribing cascade

- Fear of litigation
- Poor evidence for stopping therapy
- Non-adherence ⇒ “therapeutic failures”
- Poor communication and Transfer of information
- Poor medication review
- Treating condition vs. patient
- Non-pharmacological options not readily available or accessed



# Deprescribing

The **continuous process** of identifying and discontinuing drugs in which *potential* or actual harm outweighs *potential* or actual benefit.....when considered in the context of a patient's **individual care goals**.

E.g. the patient's physical functioning, co-morbidities, preferences and lifestyle.

“Experience suggests that both prescribing and deprescribing would lead to **similar claims of litigation** and the same legal tests will apply”

*(N.Barnett and O.Kelly Legal implications of deprescribing)*

“A patient is entitled to considered medical advice, application of evidence, full disclosure of all material risks and be informed of any reasonable alternative. This applies **equally** whether the decision is being made to start, stop or continue a medication”

*(N.Barnett and O.Kelly Legal implications of deprescribing)*

# Deprescribing: Identify inappropriate drugs from an accurate list of medicines

- **Clinical judgments and experience**
- Does each drug have a matching indication, is the indication still valid
- Does the drug produce limited benefit for that indication
- Is it a high risk drug
- Are the benefits outweighed by unfavorable ADRs

The screenshot shows the MedicheC ASSESSMENT tool interface. At the top is a dark blue header with a red pill icon and the text 'MEDICHEC'. Below the header is the word 'ASSESSMENT' with a horizontal line underneath. The interface is divided into three numbered steps: 1. 'One by one, type the names of the medications your patient is currently taking into the search bar'. 2. 'Click on the '+' symbol to add a medication to your list'. 3. 'Refer to the results below to see your entered medications'. Below the steps is a search bar with the placeholder text 'Search medication ..'. Below the search bar is a red warning message: 'Please note MedicheC relies on a UK database of generic (unbranded) medication names. If a drug is not identified in a search please try the English/US spelling. If in doubt please check with a local physician or pharmacist to clarify drug names.' At the bottom is a dark blue button with the text 'Add custom drug'.

Anticholinergic effect (AEC) tool- available as an app.

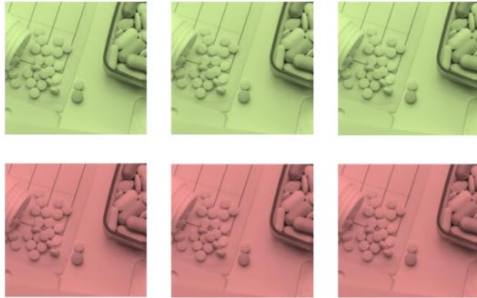


## Different targets based on different needs and life expectancy – what are we trying to achieve?

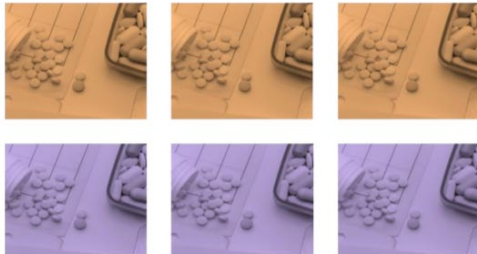
- Little to no evidence for elderly patient treatments
- Multimorbidity
- NICE – BP target in over 80's 150/90
- International diabetes federation (IDF) - HbA1c can be relaxed
- Consider pill burden of treatment (risk vs benefit)
- IDF Global Guideline for Managing Older People with Type 2 Diabetes

	HbA1c
Functionally Independent	7.0%- 7.5% (53-59mmol/mol)
Functionally dependant	7.0% - 8% (53-64mmol/mol)
Frail/Dementia	Up to 8.5% (70mmol/mol)
EOL	Simply avoid symptomatic hyperglycaemia

# NHS Scotland Polypharmacy Resources



## Polypharmacy Guidance Realistic Prescribing 3<sup>rd</sup> Edition, 2018



## Managing Multiple Medicines

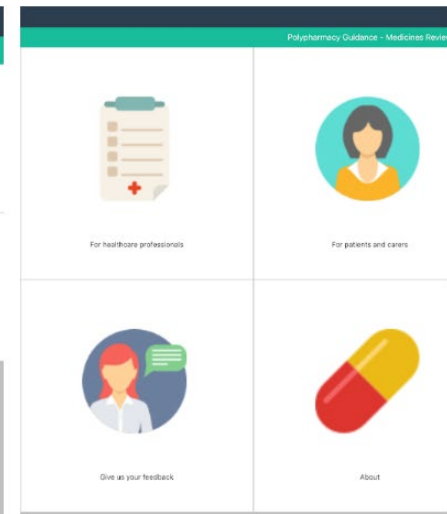
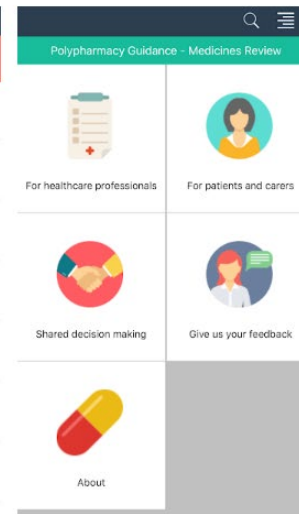
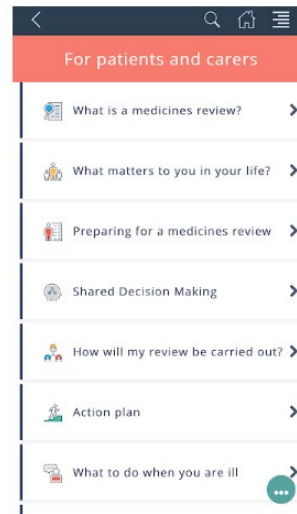
NHS Education for Scotland Medical

★★★★★ 10 

3 PEGI 3

 Add to Wishlist

Install



# RPS- Polypharmacy getting our medicines right

## Polypharmacy: Getting our medicines right



### Sections on this page

- [Key Messages](#)
- [Best practice](#)
- [Audience, Definitions, Purpose and Scope](#)
- [Background](#)
- [Polypharmacy and People](#)
- [Polypharmacy and Healthcare Systems](#)
- [Polypharmacy and Healthcare Professionals](#)
- [The Future for Polypharmacy](#)
- [Appendices](#)

- Multiple long term conditions- creates a 'pill for every ill'
- Very old age
- Dementia
- Co-morbidity
- Frailty
- Limited life Expectancy

# Tools to identify Potentially inappropriate medicines (PIMs) in older people

Age and Ageing Advance Access published October 16, 2014

Age and Ageing 2014; 0: 1-6  
doi:10.1093/ageing/afu145

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For commercial re-use, please contact [journals.permissions@oup.com](mailto:journals.permissions@oup.com)

## STOPP/START criteria for potentially inappropriate prescribing in older people: version 2

DENIS O'MAHONY<sup>1,2</sup>, DAVID O'SULLIVAN<sup>3</sup>, STEPHEN BYRNE<sup>1</sup>, MARIE NOELLE O'CONNOR<sup>2</sup>, CRISTIN RYAN<sup>1</sup>, PAUL GALLAGHER<sup>2</sup>

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### Abstract

**Purpose:** screening tool of older people's prescriptions (STOPP) and screening tool to alert to right treatment (START) criteria were first published in 2008. Due to an expanding therapeutics evidence base, updating of the criteria was required.

**Methods:** we reviewed the 2008 STOPP/START criteria to add new evidence-based criteria and remove any obsolete criteria. A thorough literature review was performed to reassess the evidence base of the 2008 criteria and the proposed new criteria. Nineteen experts from 13 European countries reviewed a new draft of STOPP & START criteria including proposed new criteria. These experts were also asked to propose additional criteria they considered important to include in the revised STOPP & START criteria and to highlight any criteria from the 2008 list they considered less important or lacking an evidence base. The revised list of criteria was then validated using the Delphi consensus methodology.

**Results:** the expert panel agreed a final list of 114 criteria after two Delphi validation rounds, i.e. 80 STOPP criteria and 34 START criteria. This represents an overall 31% increase in STOPP/START criteria compared with version 1. Several new STOPP categories were created in version 2, namely antiplatelet/anticoagulant drugs, drugs affecting, or affected by, renal function and drugs that increase anticholinergic burden; new START categories include urogenital system drugs, analgesics and vaccines.

**Conclusion:** STOPP/START version 2 criteria have been expanded and updated for the purpose of minimizing inappropriate prescribing in older people. These criteria are based on an up-to-date literature review and consensus validation among a European panel of experts.

**Keywords:** inappropriate prescribing, older people, STOPP/START criteria

- STOPP/START criteria (O'Mahoney 2014)
- STOPPFrail 2017

## Others

- CRIME (Age and Ageing 2014)
- Beers Criteria (Updated 2015)

# When to deprescribe?

•At every opportunity, but especially:

- Presenting with **new symptoms** – could this be medicine related?
- Presenting with **altered physiology**
- Patients with **advanced disease/ terminal illness**
- **Polypharmacy**
- Patients taking medication to prevent future disease where **no additional benefit may be gained from continued use.**

❖ Examples include antihypertensives, PPIs, statins, bisphosphonates

❖ Amitriptyline, pregabalin, gabapentin – neuro. pain, codeine

# Tools you need to manage polypharmacy/ deprescribing



- Consultation Skills (patient centred and values based)
- Therapeutic skills
- Research evidence
- Deprescribing tools
- Care co-ordination
- Appreciation of complexity in care of older people and 'nurturing care'
- Challenging to do, can require multiple reviews/time constraints



# Strategies to overcome barriers

Clear COMMUNICATION

Clear and precise instructions – ensure you are aware where to check for the answers: BNF, medicines.org.uk, Pharmacy team, acute Trust medicines information teams

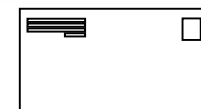
Complete actions don't pass the buck – “GP to start...”

“GP to review”

“As Directed” “Affected area”

Follow up and review

Is the patient clear on how to take their medicines/indication/duration- will they remember?



# Non adherence



Uncontrolled pain  
Nausea  
Uncontrolled dizziness  
Poor diabetes control  
Feels full after taking medications  
“Just so many – where do I begin with them”





# Medicines Waste- £300 million <sup>1</sup>



- ❖ Estimated £90 million unused medicines in individuals' homes
- ❖ £110 million returned to community pharmacies in a year
- ❖ In care homes: £50 million- unused NHS supplied medicines to be disposed of

1. Hazell, B. and Robson, R. 2015. Pharmaceutical waste reduction in the NHS. NHS BSA

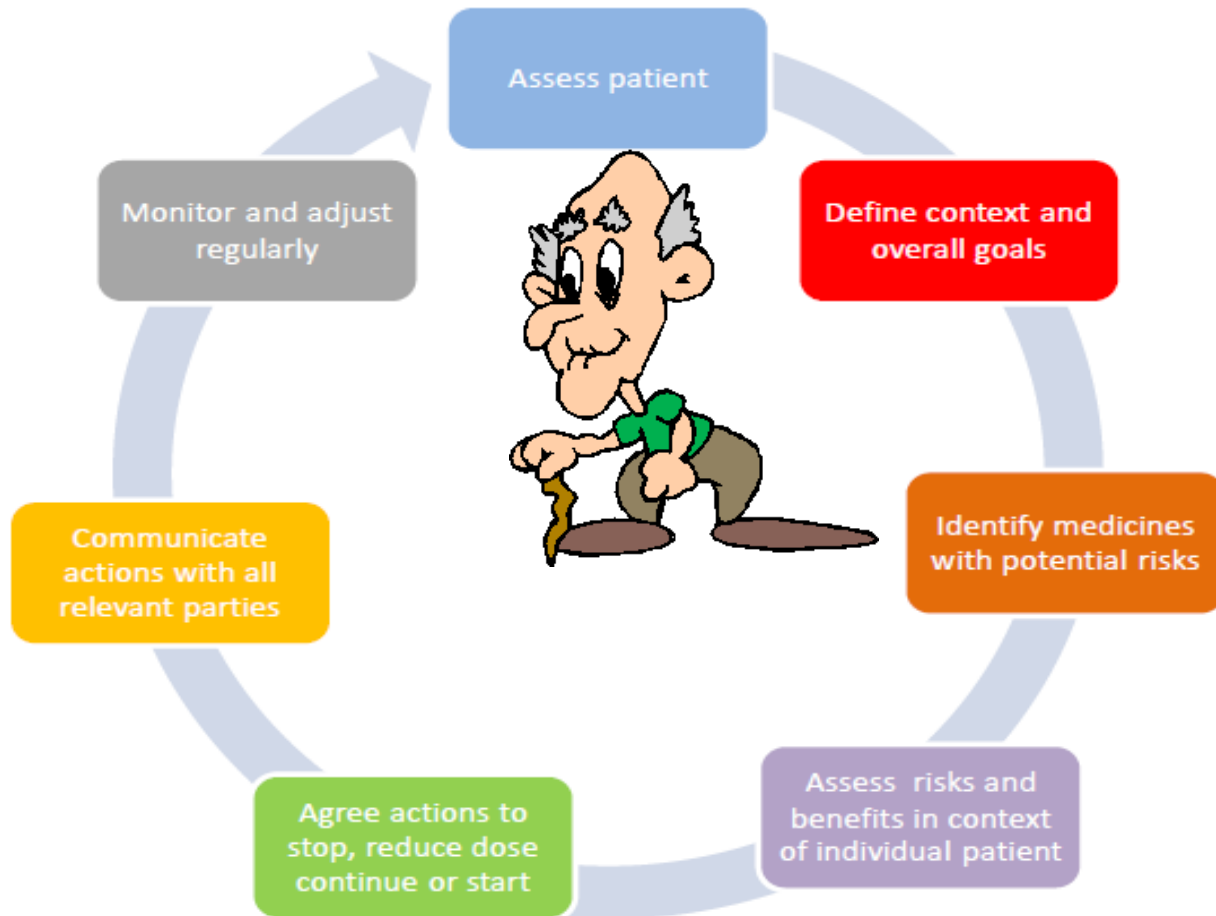
# Patient engagement is key!





**What happens when we don't communicate**

## A patient centred approach to managing polypharmacy in practice



# Summary



- Older people take more drugs than other age groups
- Polypharmacy can be associated with poor clinical outcomes, adverse effects, increased costs and wastage
- Deprescribing is as important as prescribing to optimise medicines use in older people
- **Regular patient-focused medication review is NEEDED**
- Integrated care and multidisciplinary working is vital
- Always consider the long term plan for prescribing- opioid patches
- General issues faced: reading labels on boxes, popping the medicines from the blister, swallowing, strengths of medicines available
- Empower the patient/family/carer

# Also remember:



**Thank You**  
**Any Questions/Reflections?**

**contact: [p.patel6@nhs.net](mailto:p.patel6@nhs.net)**

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