

# Enhanced Care for Older People Learning Session Number 4

Medicines Optimisation and Older People

*Patrick Dawodu Clinical and medicines optimisation  
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EnCOP Lead: Angela Fraser Date: 22nd February 2022

# Housekeeping

## During the session

- We will keep participants muted whilst we are presenting. This avoids distracting our speakers and reduces sensory stimulation which is important for some people. However, if you wish to ask a question you can do this by adding it to the chatbox. We will attempt to address questions, if we can't then we will follow up after the event.
- Please feel free to turn your camera on and off as you need to. If you need it off the whole time, that is totally fine.
- If you need a break at any time during the session, then please leave the meeting and re-join again when you feel ready.

## Accessibility

- Occasionally you may have difficulty seeing or hearing video clips that are played, this will usually be due to your own device or software settings and not something we can influence during the webinar session. Please be assured all content will be shared following the event so you will have an opportunity to view afterwards.
- Information on accessibility features in Teams can be found here: <https://support.microsoft.com/en-us/office/accessibility-support-for-microsoft-teams-d12ee53f-d15f-445e-be8d-f0ba2c5ee68f> and you can contact us with any other accessibility questions.

## Recording

The event will be recorded. The recording and presentation will be circulated and uploaded on to the website following the event.

# Session Aim & Linked Competencies

## Aim:

To raise awareness and develop understanding of medicines optimisation in older people's care

## Linked EnCOP Domains:

**A: Values, attitudes and ethics**

**D1: Communication with older people, families and friends**

**D2.1: Frailty – Understanding, identification and recognition**

**D2.2: Assessing, planning, implementing and evaluating care**

**D2.5: Management of physical health in frailty**

**D2.3 Ageing well – promoting and supporting holistic health and wellbeing**

**D2.4 Ageing well- promoting and supporting independence and autonomy**

**D2.6: Pharmacology**

**D3: Management of dementia**

**D4: Management of mental health**

**D5: End of life care**

# Medicines Optimisation and Older People

*Patrick Dawodu Clinical and medicines optimisation  
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*Bachelor of Pharm, M.Sc. Medicines Management, Higher Masters Health and  
Wellbeing, PGCE*



# Introduction

*Medicines Optimization applies to All Demographics*

# What is Medicines Optimization?

Right patients get the right choice of medicine, at the right time.

Focusing on patients and their experiences,

Improve patient outcomes;

Avoid taking unnecessary medicines;

Reduce wastage of medicines; and

Improve medicines safety.



# Challenges of Prescribing for Older Adults

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Multiple  
medical  
conditions

Multiple  
medications

Multiple  
prescribers

Frequently  
excluded from  
clinical trials

Different  
metabolisms  
and responses

Adherence  
and cost

Supplements,  
herbals, and  
OTC drugs

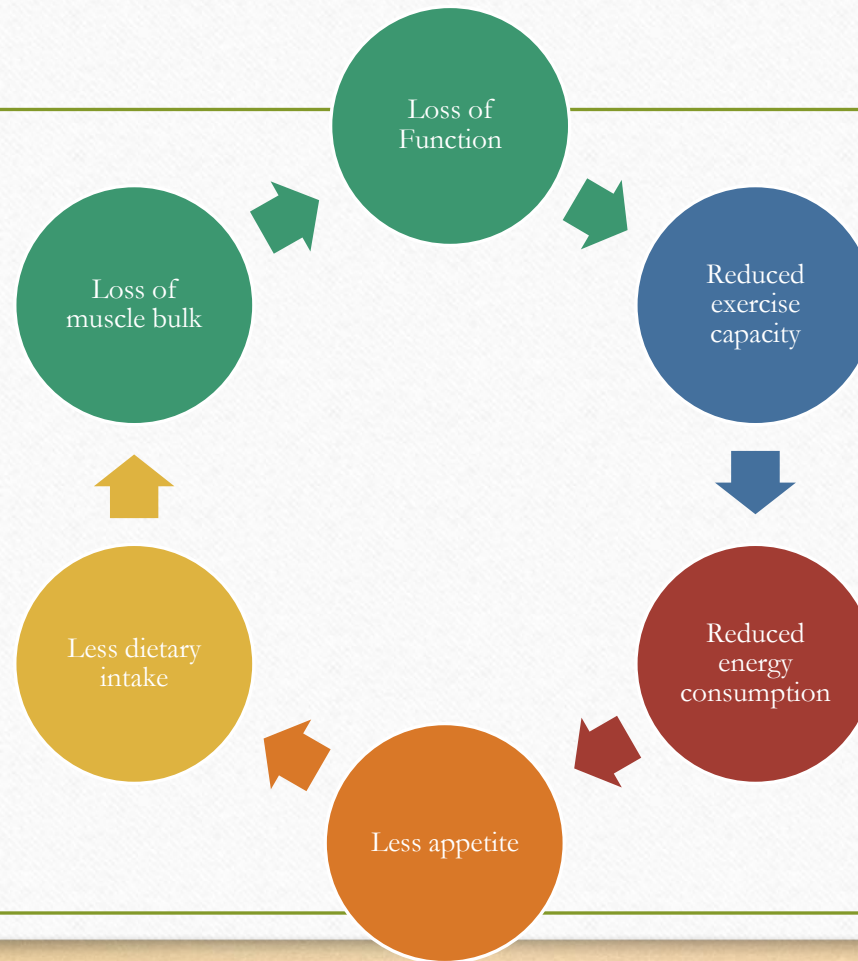
# FRAILITY

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- Age-associated decline in physiologic reserve and function across multi-organ systems leading to increased vulnerability for adverse health outcomes (Fried et al. 2001)
- A distinct health state where a minor event can trigger significant changes in health from which the patient may fail to return to their previous level of health (British Geriatric Society)
- Progressive long term condition, with episodic deteriorations



# Frailty-Gradual acquisition of comorbidity alongside decline in reserve



# What works?

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- **Evidence shows benefits from:**
  - Proactive planned multidisciplinary care
  - Comprehensive geriatric assessment (including medication reviews)
  - Care planning



# Ageing is not a disease

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*Aging is not a disease and is not treatable by medicaments.*

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*Many older people admitted to hospital or reviewed during  
long term hospitalization improved greatly when the drug  
regimen that they had been taking, was stopped.*

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*(WHO)*



# The science

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*Pharmacokinetics and disease states*

**Table 1. Main Age-Related Changes in Pharmacokinetics**

Process	Age-related change	Effect
Absorption	Increased gastric pH	Slightly decreased absorption
	Delayed gastric emptying	
	Reduced splanchnic blood flow	
	Decreased absorption surface	
	Decreased gastrointestinal motility	
Distribution	Increased body fat mass	Increased volume of distribution and half-life for lipophilic drugs
	Reduced body lean mass	
	Reduced body total water	Increased plasma concentrations of water-soluble drugs
	Reduced serum albumin	Increased free-fraction of highly protein-bound acidic drugs
	Increased $\alpha$ 1-acid glycoprotein	Decreased free-fraction of basic drugs
Metabolism	Reduced hepatic blood flow and overall liver mass	Less effective first-pass metabolism and phase I metabolism
Excretion	Reduced renal blood flow	Impaired renal elimination of water-soluble drugs
	Reduced glomerular filtration rate	



1

### Cardiac Disease

- Impaired cardiac output (decreased absorption, metabolism, clearance)
- Greater susceptibility to cardiac adverse effects

2

### Kidney and Liver Disease

- Decreased drug clearance and altered metabolism

3

### Neurological Diseases

- Diminished neurotransmitter levels
- Greater susceptibility to neurological effects

Physiologic Changes  
Associated with Disease States



# Patient Centred

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*Taking the older adult perspective.*

## A patient-centred approach to managing polypharmacy in practice



©Nina Barnett Lelly Obboh & Katie Smith, NHS Specialist Pharmacy Service vs 2 May 2015

# Patient Cantered

Access Patient

Define Contents and  
Overall goals

High Risk Medications

Risk/Benefits in context  
of Individual Patients

Agree Actions

Involve others in MDT

Monitor and adjust  
Regularly



# ABCD of Medicines Optimisation

**Agree** to prioritise one or two issues, use a structure to manage the consultation

**Balance** of

- Importance to the patient ("*what matters to you*")
- Current evidence and clinical uncertainty\* (tools, evidence "*what's the matter with you*")
- Risk/benefits, reasonable alternatives (your clinical judgement)

**Communicate** shared, values-based decisions and actions with patient/carers, health and social care.

**Document** the agreed decisions, then monitor and review

# Minimizing adverse effect

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whenever possible, use  
non-pharmacological  
treatments

Start low, increase  
slowly, monitor  
frequently

smallest number of  
medications/simplest  
dose regimens. Start one  
medication at a time.

be familiar with drug  
effects in elderly.

Alternative applications  
if difficulties swallowing  
tablets. Assess  
adherence with regimen.

# Minimizing adverse effect

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Simple verbal/written instructions for every medication

presenting symptoms may be a result of medications (not old age)

Ensure carer understands treatment

Be aware of patient preferences (Be patient centred) .Once daily is usually best.

Is it efficacious at lower dose?



# Medication Review

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*To reach an agreement*

## Five As

- *Barnett N Improving pharmacy consultations for older people with disabilities Journal of Medicines Optimisation 2016*

**ASK**-give your full attention and don't make assumption

**ACKNOWLEDGE**-their situation, show you don't judge them whatever you thing

**ADDRESS**- their issue honestly. Inform of risk/benefit and help available

**ACCEPT**-their decision even if you do not agree.

**AGREE ACTIONS**-responsibilities, monitoring, 'safety net', follow up plan



# Indications for Drug Therapy

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A specific diagnosis

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Clearly documented symptom or condition to be treated

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Avoid the use of a drug to treat the side effects of another drug

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Use a validated tool to support medication review, egSTOPP/START1



# Indications for Reduced Dosages

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- Weight is less than average
- Decreased liver or renal function
- Experiencing exaggerated responses to drugs that may reflect toxic levels

# “Deprescribing” Should Be Considered

## JAMA Intern Med. 2015;175(5):827-834

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New symptom or clinical syndrome suggestive of ADE



Advanced disease, terminal illness, extreme frailty



High-risk drugs or combinations



Preventive drugs for scenarios associated with no increased risk despite stopping drug

Stopping alendronate after 5 years of treatment results  
Stopping statins for primary prevention



Patient/family willing to participate in shared decision

Medication review.

“Deprescribing”

*JAMA Intern Med.*

2015;175(5):827-  
834





Medication review.  
“Deprescribing”  
*JAMA Intern Med.*  
2015;175(5):827-  
834



Instruct patient to bring all medications to visit  
(prescription and non-prescription)



Medication review.  
“Deprescribing”  
*JAMA Intern Med.*  
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834



Instruct patient to bring all medications to visit  
(prescription and non-prescription)



**What Are Current Indications for Each  
Drug? Why prescribed? Still relevant?**



Medication review.  
“Deprescribing”  
*JAMA Intern Med.*  
2015;175(5):827-  
834



Instruct patient to bring all medications to visit (prescription and non-prescription)



What Are Current Indications for Each Drug? Why prescribed? Still relevant?



Is the Patient Actually Taking the Drug? Dosage form?



Does the Likely Benefit of the Drug  
Outweigh Its Potential for Harm?  
Drug interaction? Side effects?  
Monitoring?



# Unnecessary Drug Administration

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- Excessive dose (including duplicate therapy)
- Excessive duration
- Inadequate monitoring
- Inadequate indications
- Presence of adverse consequences that indicate the dose should be reduced or discontinued

1

Simplifying the regimen if possible

2

Establishing a routine for taking medications

3

Scheduling medications at mealtime or in conjunction with other specific daily activities

4

Developing a method with the patient for remembering if he or she actually took the medication

5

Reducing S/E: More fiber and fluid can help to offset drug-induced constipation, Scheduling diuretic so that it does not interrupt sleep

6

Frequent intake of liquids or the use of lozenges to help with dry mouth caused by medications

## Measures to Improve compliance



# Inappropriate Conditions for Use of Antipsychotic Drugs

Wandering (To move about without a definite destination or purpose)

Poor self-care

Restlessness

Impaired memory

Anxiety

Depression (without psychotic features)

Insomnia



# Medicines Optimization in Care Homes

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*On the lookout*

# The 6 R's of Medicines Administration in Care Homes

- right resident
- right medicine
- right route
- right dose
- right time
- resident's right to refuse

# Prescribers Should Work with-

The resident and/or their family members or carers



Total team of health and social care practitioners  
(multidisciplinary team(MDT)).



The roles and responsibilities of each member of the team and how they work together should be carefully considered and agreed upon locally. Training should be provided so that they have the skills needed



Medication  
Optimization  
Should  
involve the  
MDT

- This should involve
- pharmacist
- community matron or specialist nurse, such as a community psychiatric nurse
- GP
- member of the care home staff
- practice nurse
- social care practitioner.

# Critical Medications

Take Care



# Diuretics (27.3%)

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Thiazide diuretic with hypokalaemia (i.e. serum  $K^+$  less than 3.0mmol/L), hyponatraemia (i.e. serum  $Na^+$  less than 130mmol/L) hypercalcaemia (i.e. corrected serum calcium greater than 2.65mmol/L) or with recent/ concurrent gout (hypokalaemia, hyponatraemia, hypercalcaemia and gout can be precipitated by thiazide diuretic. **Bendroflumethiazide**

Loop diuretic: treatment for hypertension safer, more effective alternatives available. Treating dependent ankle oedema without clinical, biochemical evidence or radiological evidence of heart failure, liver failure, nephrotic syndrome or renal failure (leg elevation and/ or compression hosiery usually more appropriate). **Furosemide**.



Non-steroidal  
anti-inflammatory  
drugs (NSAIDs),  
including  
Aspirin (29.6%)



HISTORY OF  
ULCER, GI  
BLEEDING  
(CONSIDER PPI  
WITH LONG TERM  
USE??)



WITH  
CONCURRENT  
ORAL  
CORTICOSTEROID,  
ANTIPLATELET,  
ANTI-  
DEPRESSANT  
(RISK OF  
BLEEDING).



SEVERE OR  
UNCONTROLLED  
HBP



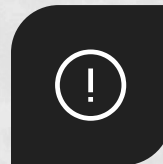
>3MONTHS  
WHERE SIMPLE  
ANALGESIA NOT  
TRIED



EGFR  
<50ML/MIN/1.73M  
(RISK OF  
DETERIORATION  
IN RENAL FNX)



WITH WARFARIN  
OR NOAC (RISK OF  
BLEEDING).



AVOID  
DICLOFENAC,  
COX-2 SELECTIVE  
IN CVS

# Anticoagulants (10.5%)

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Antiplatelet agents with warfarin or NOACs in patients with stable coronary, CV or PAD (no added benefit)

Warfarin or NOAC limited to 3-12 months in DVT or PE

DAPT limited to 12 months in CVA



## Summary

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- **Multidisciplinary  
Person-Centred  
Care.**



# References and Resources

- Barnett N *Improving pharmacy consultations for older people with disabilities Journal of Medicines Optimisation* 2016
- ✓ **Beers criteria (US)** <http://www.americangeriatrics.org/files/documents/beers/BeersCriteriaPublicTranslation.pdf>
- ✓ **Medication appropriateness index** <https://www.ncbi.nlm.nih.gov/pubmed/1474400>
- ✓ **STOPP/START tool, STOPPFrail(Ireland)** <http://ageing.oxfordjournals.org/content/early/2014/10/16/ageing.afu145.full>
- ✓ **STOPIT tool** <https://www.sps.nhs.uk/articles/screening-tool-for-older-peoples-potentially-inappropriate-treatments-stopit-medication-review-tool/>
- ✓ **Anticholinergic Burden Scales** <http://www.medicheck.com/assessment>
- ✓ **Medstopper tool (US)** <http://medstopper.com/>
- ✓ **NHS Wales Health Board 2013 Polypharmacy: Guidance for Prescribing in Frail Adults Practical guide, full guidance, BNF sections to target** <http://www.wales.nhs.uk/sites3/documents/814/PrescribingForFrailAdults-ABHBpracticalGuidance%5BMay2013%5D.pdf>
- ✓ **NICE multimorbidity guidance and database of treatment effects** <https://www.nice.org.uk/guidance/ng56> and <https://www.nice.org.uk/guidance/ng56/resources/database-of-treatment-effects-excel-2610552205>
- ✓ **Canadian Deprescribing Network and Deprescribing.org** <https://deprescribing.org/resources/deprescribing-guidelines-algorithms/>
- ✓ **RPS polypharmacy Guidance 2018. Getting our medicines right** <https://www.rpharms.com/recognition/setting-professional-standards/polypharmacy-getting-our-medicines-right>
- ✓ **National overprescribing review report (UK) 2021**
- [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1019475/good-for-you-good-for-us-good-for-everybody.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1019475/good-for-you-good-for-us-good-for-everybody.pdf)
- ✓ **Articles on deprescribing** <https://academic.oup.com/ageing/pages/deprescribing-collection>

Thanks



# Ideas for Learning Consolidation & Competency Conclusion

## Consolidating Learning:

### Reflection on the session & considering application to practice & what this means 'your people'

- Think about this session in relation to your own role
- How much of this was revision?
- What have you learned today ?
- How will this help you in your role ?
- Think about your EnCOP self–assessment; consider which performance indicators this session may relate to and how this can be used as part of your own development / competency achievement.

#### Competency Domains:

A: Values, attitudes and ethics

D1: Communication with older people, families and friends

D2.1: Frailty – Understanding, identification and recognition

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D2.6: Pharmacology

D3: Management of dementia

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D5: End of life care





[More information can be found within the Frailty icare website](#)

[www.frailtyicare.org](http://www.frailtyicare.org)

Our EnCOP pages are located in the workforce section

**EnCOP Library of Learning & Development Resources can be found at:**

<http://frailtyicare.org.uk/making-it-happen/workforce/enhanced-care-of-older-people-with-complex-needs-encop-competency-framework/encop-learning-resources/learning-resources/>

## Feedback about today's session and any future sessions you may like to see included in our webinar series....

All feedback welcomed; You may want to consider the following –

Was it easy to book onto the session?

Did you find the session went well in this online format ?

Was the content of the session relevant to your area of practice / job role?

Did you enjoy the session?

Thinking about future webinar's, which topics linked to older person's care would you be most interested in?

Please put any suggestions in the chat.

Please comment in the chat today or feel free to email us: [ghnt.encop@nhs.net](mailto:ghnt.encop@nhs.net)