Polypharmacy:
getting the balance right

The AHSN Network

Polypharmacy Action Learning Sets

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2022

How to get the most out of the Polypharmacy ALS

The Polypharmacy Action Learning Set model was co-designed and delivered by Wessex AHSN, in collaboration with Clare Howard, Clinical Lead for the National Polypharmacy Programme, Zoe Girdis, Consultant in Primary Care, Lead Clinical Pharmacist PCN and Steve Williams Senior PCN Clinical Pharmacist, HEE Clinical Fellow (Medication Safety) and is now being scaled across England by the AHSN Network.

Wessex Academic Health Science Network

NHS Health Education England

Polypharmacy: getting the balance right

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Polypharmacy:
getting the balance right

Agenda

01 Size and scale of Polypharmacy.

02 What are we doing about it?

03 Strategic and policy context.

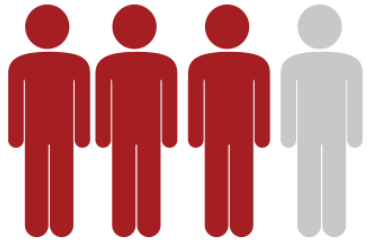
04 Technical and behavioural elements to addressing problematic Polypharmacy.

05 Tools and further support.

Size and scale of Polypharmacy

Medicines are intended to help patients but they can cause harm…

In England in July 2021 there were 934,644 people on 10 or more medicines and 371,520 were 75 or over.



Over a six-month period, over **three quarters of people** over the age of 70 will have an adverse drug reaction.

A person taking 10 or more medicines is **300% more likely** to be admitted to **hospital.**

There has been a **53% increase** in the number of emergency hospital admissions caused by adverse drug reactions.

Polypharmacy adds preventable cost to the healthcare system and diminishes quality care for the patient.

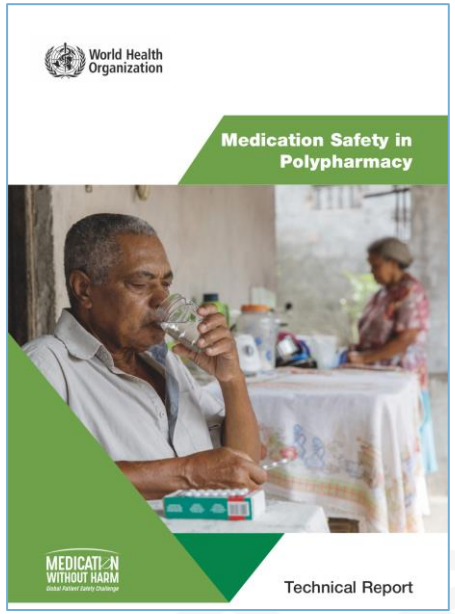
We dispense over 1 billion prescription items per year in Primary care in England.

Most of the harm from polypharmacy is **preventable…..**

What are we doing about it?

IT'S GLOBAL

WHO has said "given that medicines are the most common therapeutic intervention, ensuring **safe medication use and** having **processes** in place to improve medication safety should be of **central importance**".



IT'S A BIG CHALLENGE AND GROWING

We dispense over a billion prescription items a year in primary care in England each year.

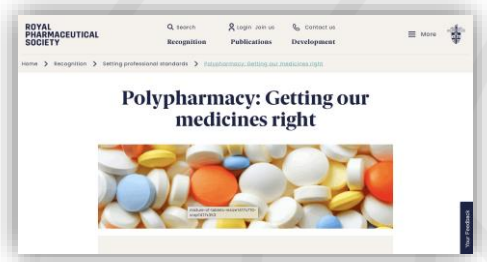
Age UK have recently highlighted the issue

RPS published guidance

ACTION IS NEEDED

NHS BSA Polypharmacy Prescribing Comparators tool is available to help GPs and Pharmacists **find the people most at risk.**

Shared Decision Making consultations are helping clinicians and patients to reach agreement about what is important to the patient and what is clinically important.



Strategic and Policy Context

NHS Long Term Plan

Commitment to increase the number of Pharmacists working in General Practice.
Highlights the importance of Structured Medication review

Primary Care Networks

Funding for PCNs to secure Pharmacists

QOF

Update

NICE guidance on Shared Decision Making (SDM)

DHSC Overprescribing review

The role of the NHS BSA Polypharmacy Prescribing Comparators?

Polypharmacy: getting the balance right

01

Benchmarking polypharmacy prescribing

Use the data tool **see how GP practices' prescribing** (both volume and risky combinations of medicines) **compares to others' in England.**

02

Prioritise and identify those at risk from harm

The tool **helps GP practices to quickly and reliably prioritise** the areas where practices have the most risk (because you can't review everyone). Then, **without any additional technology or kit**, the GP practice can identify which of their patients most require a medication review.

03

Measure the harm

The data is updated every month so clinicians can quickly see the impact of their interventions.

The NHS BSA Polypharmacy prescribing comparators are **available to all 191 CCGs** in England and their constituent GP Practices.

Polypharmacy prescribing comparators in action:

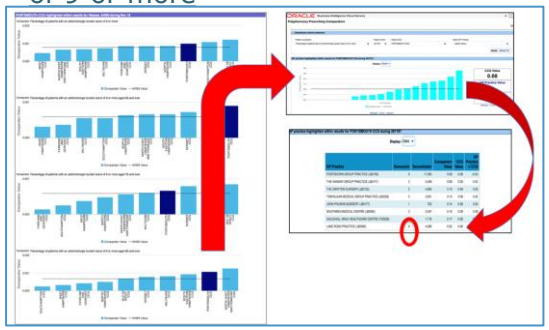
YouTube link:
https://youtu.be/iqKf1Lz0eq4

What does the tool look like?

STEP 1 Know your data.

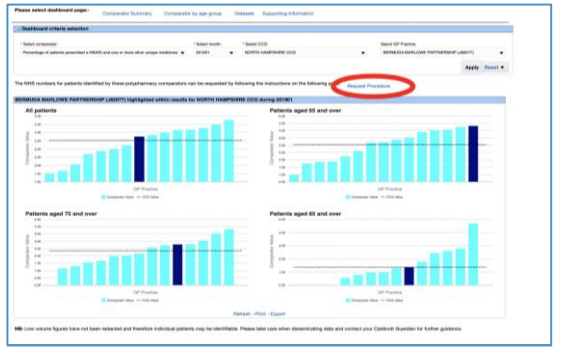
Look at your local polypharmacy data via ePACT 2 and select an area of concern

Portsmouth CCG percentage of patients with Anticholinergic Score of 9 or more



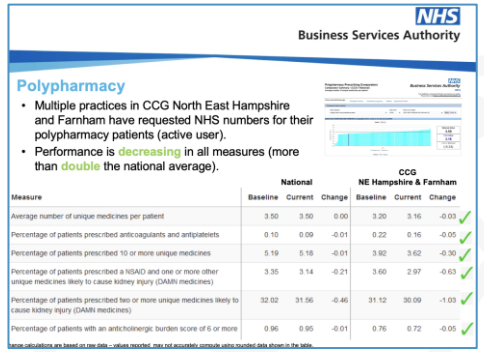
STEP 2 Find patients at risk.

Complete the "request procedure" to access the NHS numbers of the patients in your practice deemed to be at risk and invite those patients for a medication review



STEP 3 Make a difference!

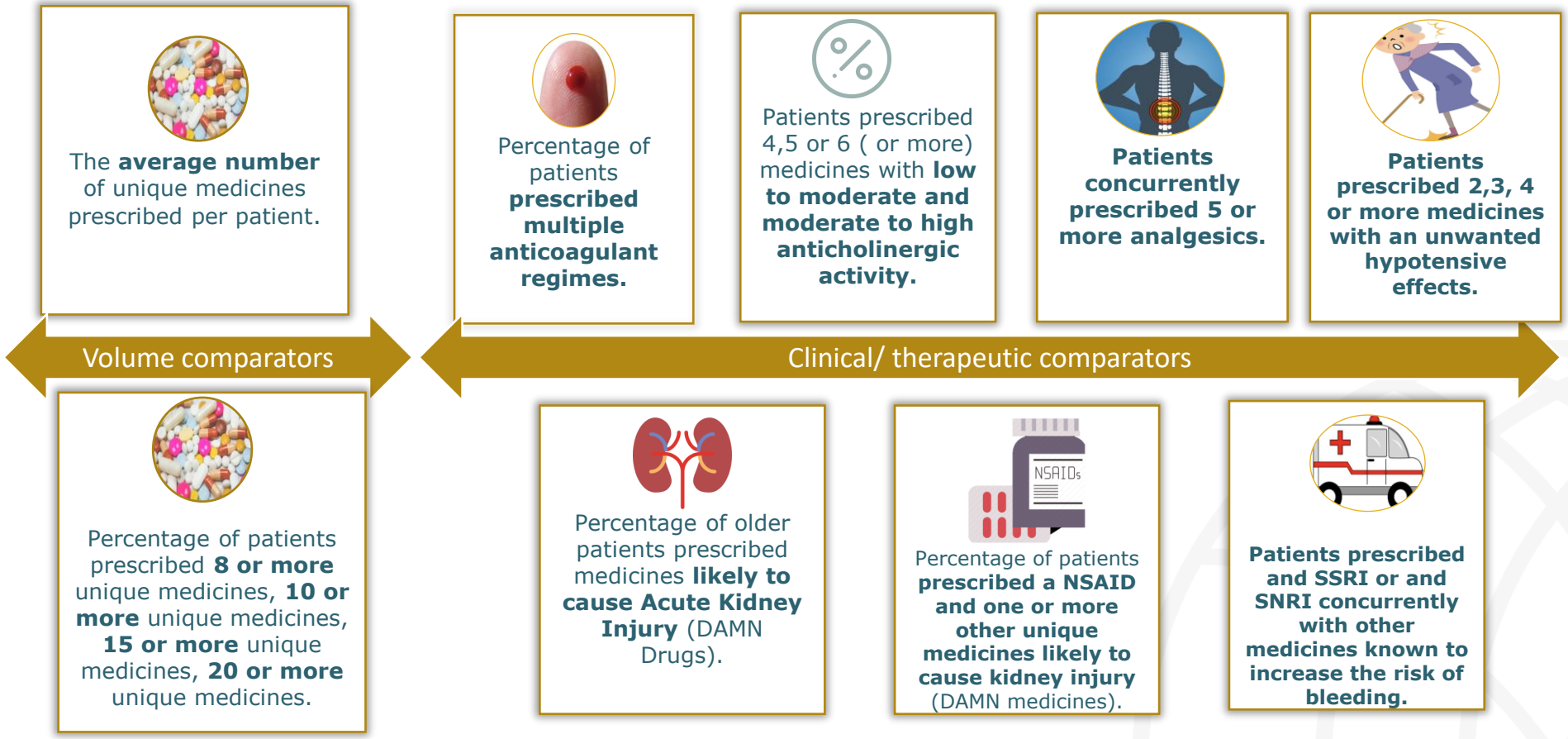
NE Hampshire and Farnham CCG supported every practice to do this well and have demonstrated a decrease in all polypharmacy comparators at double the national average rates!



NHS
Business Services Authority

To access your data go to:
nhsbsa.nhs.uk/epact2/dashboards-and-specifications/medicines-optimisation-polypharmacy
For more resources go to
https://wessexahsn.org.uk/projects/160/polypharmacy-what-next-planning-for-wessex

What do the comparators measure?

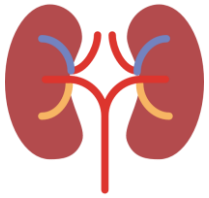


What about patients?

COMPARING DATA FROM BEFORE JULY 2017 (PUBLICATION DATE OF COMPARATORS) TO JUNE 2019:

9,400 fewer patients
prescribed 10 or more unique medicines.

25,900 fewer patients
prescribed a NSAID and one or more other unique medicines likely to cause kidney injury.



58,300 fewer patients
prescribed two or more unique medicines likely to cause kidney injury (DAMN medicines).

4,800 fewer patients
with an anticholinergic burden score of 6 or more.

7,500 fewer patients
with an anticholinergic burden score of 6 or more aged 65 and over.

700 fewer
patients prescribed two or more anticoagulants and antiplatelet medicines.

A case study:

- Using the data, the North-East Hampshire and Farnham CCG Care Home Pharmacist has has undertaken over 250 reviews and made over 800 interventions. As a result;
- The average number of medicines per patient has reduced from 9.4 to 7.6
- The average anticholinergic burden score has reduced from 1.39 to 1.00

WHO have cited evidence that pharmacist-led medication reviews reduce hospital admissions.

Prescribing we should be concerned about...

NHS North East Hampshire and Farnham Clinical Commissioning Group

Polypharmacy: getting the balance right

01

RED FLAG DRUGS

NSAIDs
Anticoagulants
Anti-platelets
Diuretics

Practitioners should always think about "red flag" drugs in the same way as diagnostic red flags

02

CONCERNING COMBINATIONS

DAMN drugs
(Diuretics , ACEI/Angiotensin antagonists/ Metformin / NSAIDs Anticholinergic Burden

CNS drugs
(Opiates / GABA / Antidepressants / Antipsychotics / Anxiolytics

PINCER OR THE NHS BSA POLYPHARMACY PRESCRIBING COMPARATORS WILL HELP YOU TO IDENTIFY THESE TYPES OF PATIENTS IN YOUR PRACTICE.

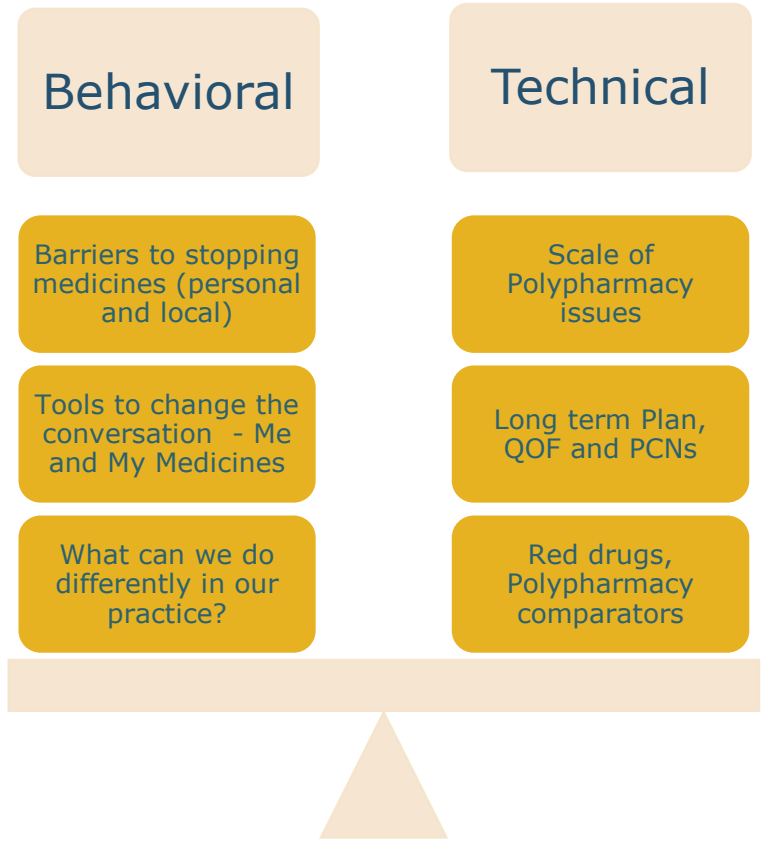
Victim or villain?

Personal barriers
Environmental barriers
Behavioural barriers
Technical barriers

QOF
Specialist silo prescribing
Interface
Prescribing cascade

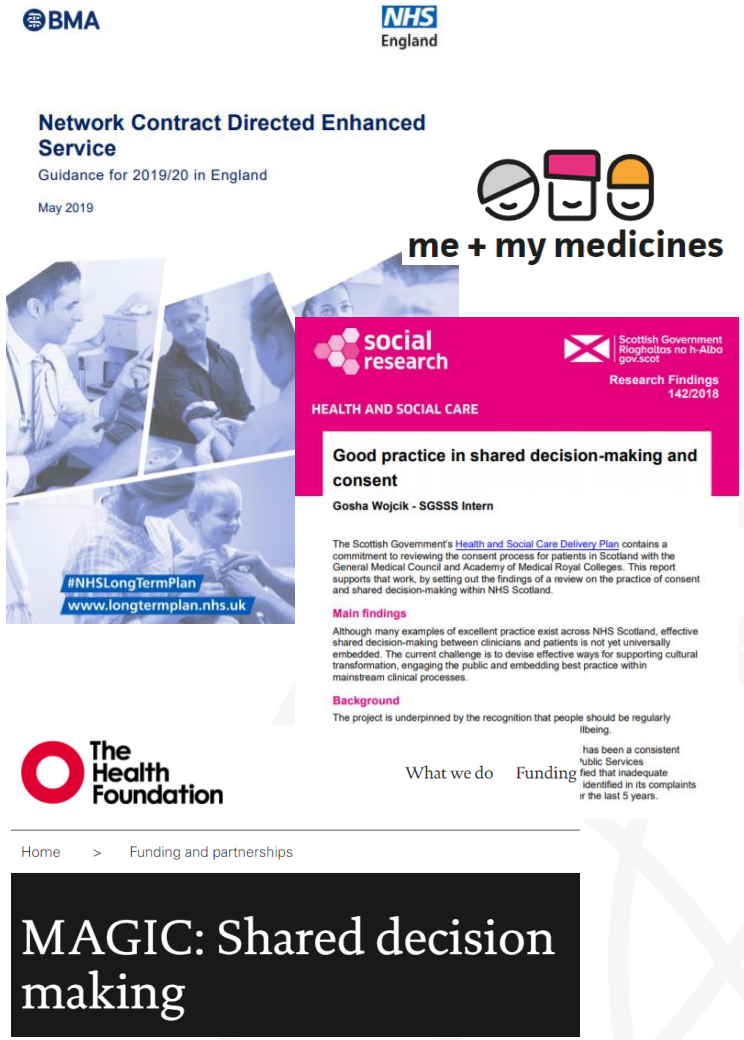
We all work in a **complex** and **over-burdened system…..**

Addressing problematic polypharmacy requires both behavioural change and technical knowledge.



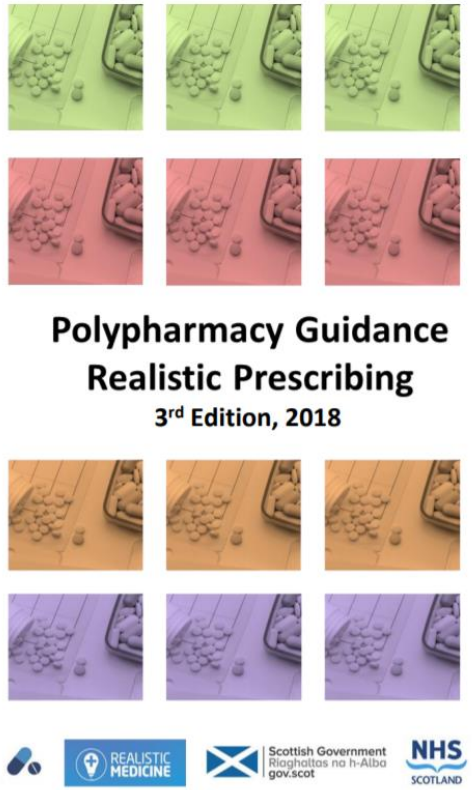
Behavioural tools to address problematic polypharmacy

- Firstly, you can't be expected to do good shared decision making in a 7-minute consultation
- No single tool can fix this
- Change is about moving towards shared decision making over time
- Working together as GPs and Patients to learn how to do this together
- There are ways to make shared decision-making work well



Technical tools to address problematic polypharmacy

01 Scottish Polypharmacy Guidance: Realistic Prescribing 2018



02 Size & scale of Polypharmacy

University Hospital Southampton NHS
NHS Foundation Trust

MEDICINE SAFETY PORTAL
Safer prescribing for primary care

Visit:
https://www.medicinesafety.co.uk/p/anticholinergics-introduction.html

Technical tools to address problematic polypharmacy

03 NO TEARS model (2004)

The NO TEARS tool

Need and indication

Open questions

Tests and monitoring

Evidence and guidelines

Adverse events

Risk reduction or prevention

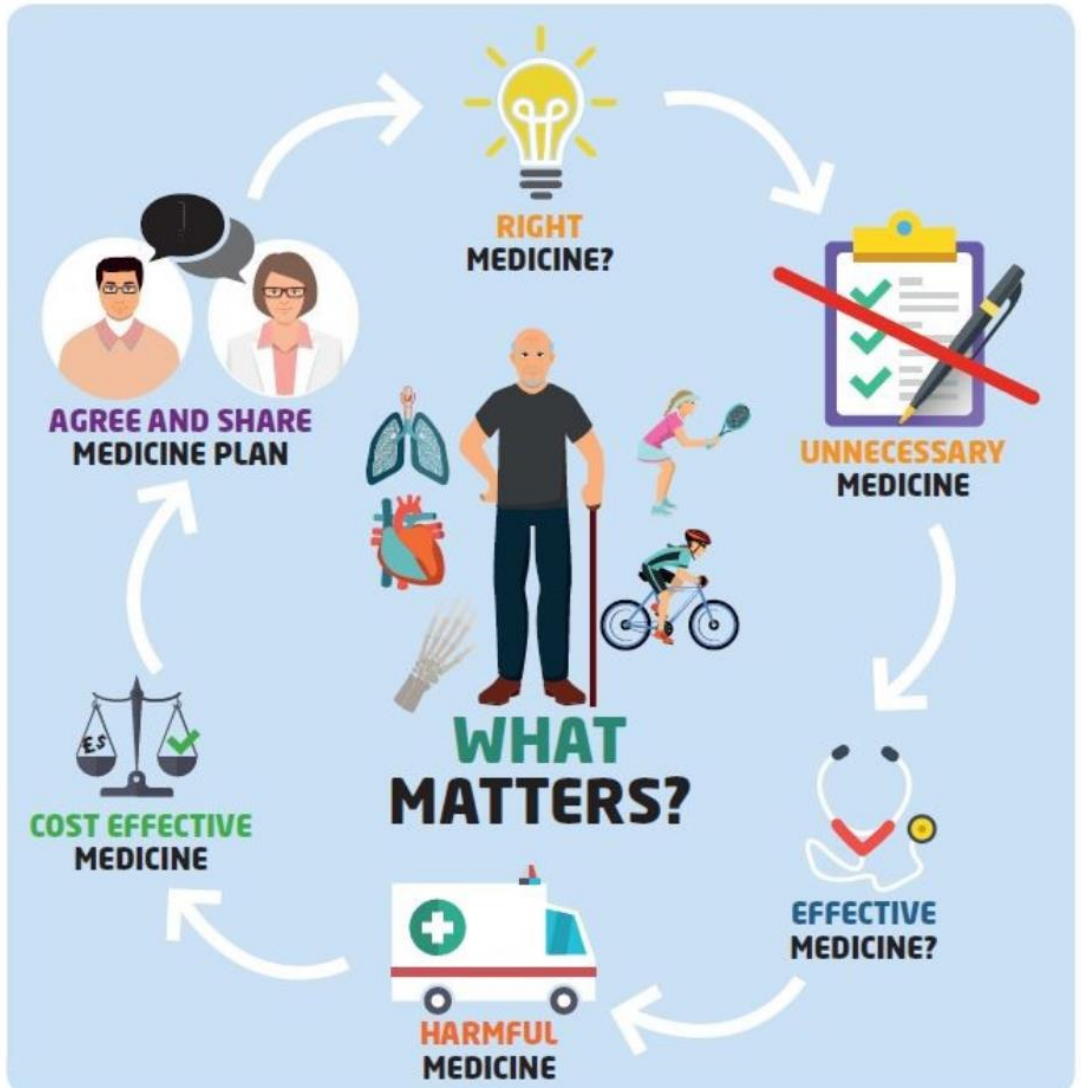
Simplification and switches

thebmj

Scottish Polypharmacy Guidance

NHS North East Hampshire and Farnham Clinical Commissioning Group

Polypharmacy: getting the balance right



7 STEPS

focuses on person centred care and the need for shared decision-making.

Table 2b: An overview of therapeutic groups under each step

Step 2: Essential drug therapy – Only consider stopping following specialist advice

Discuss with expert before stopping	Discuss with expert before altering	
○ Diuretics - in LVSD (7)	○ Anti-epileptics	○ Thyroid hormones
○ ACE inhibitors - in LVSD (17)	○ Antipsychotics	○ Amiodarone
○ Steroids	○ Mood stabilisers	○ Antidiabetics (34)
○ Heart rate controlling drugs	○ Antidepressants	○ Insulin
	○ DMARDs	

Step 3: Potentially unnecessary drug therapy

Check for expired indication	Check for valid indication	Benefit versus Risk
○ PPI(1) /H^2 blocker (2)	○ Anticoagulant (5)	○ Antianginals (12)
○ Laxatives (3)	○ Anticoagulant + antiplatelet (6)	○ BP control (15)
○ Antispasmodics (4)	○ Aspirin (6)	○ Statins (14)
○ Oral steroid (22, 36)	○ Dipyridamole (6)	○ Corticosteroids (20)
○ Hypnotics/anxiolytics (24)	○ Diuretics (7)	○ Dementia drugs (26)
○ H^1 blockers (29)	○ Digoxin (9)	○ Bisphosphonates (37)
○ Metoclopramide (28)	○ Peripheral vaso	
○ Antibacterials (oral/topical) (32)	○ Quinine (11)	
○ Antifungals (oral/topical) (33)	○ Antiarrhythmics	
○ Sodium/potassium supplements (44, 45)	○ Theophylline (2	
○ Iron supplements (44)	○ Antipsychotics (	
○ Vitamin supplements (44)	○ Tricyclic antidep	
○ Calcium/Vitamin D (44)	○ Opioids (30)	
○ Sip feeds (44)	○ Levodopa	
○ NSAIDs (46)	○ Nitrofurantoin (	
○ Drops, ointments, sprays etc. (49)	○ Alpha-blockers	
	○ Finasteride (40)	
	○ Antimuscarinics	
	○ Cytotoxics/imm (43)	
	○ Muscle relaxant	

Step 4: Effectiveness

If therapeutic objectives are not achieved:	For patients with the following indications:
Consider intensifying existing drug therapy	**Consider if patient would benefit from specified drug therapy**
○ Laxative - Constipation (3)	○ see *Drug Efficacy (NNT)* table
○ Antihypertensives - BP control (15)	○ CHD - Antithrombotic, statins, ACEI/ARB, beta blocker
○ Antidiabetics - HbA_{1c} control (34)	○ Previous stroke/TIA - Antithrombotic, statin, ACEI/ARB
○ Warfarin - INR control	○ LVSD - Diuretic, ACEI/ARB, beta blocker
○ Rate limiting drugs - Heart rate?	○ AF - Antithrombotic, rate control
○ Respiratory drugs – Symptoms?	○ DMT2 - Metformin
○ Pain control	○ High fracture risk – Bone protection

Step 5: Safety

Drugs poorly tolerated in frail adults	High –risk clinical scenarios		
See Gold National Framework on frailty	○ *Cumulative Toxicity tool*	○ NSAID + age >75 (without PPI)	
○ Antipsychotics (incl. phenothiazines)	○ *Sick day rule guidance*	○ NSAID + history of peptic ulcer	
○ NSAIDs (46)	○ Metformin + dehydration	○ NSAID + antithrombotic	
○ Digoxin (doses ≥ 250 micrograms) (9)	○ ACEI/ARBs + dehydration	○ NSAID + CHF	
○ Benzodiazepines (24)	○ Diuretics + dehydration	○ Glitazone + CHF	
○ Anticholinergics (incl. TCAs) (27)	○ NSAIDs + dehydration	○ TCA + CHF	
○ Combination analgesics	○ NSAID + ACEI/ARB + diuretic	○ Warfarin + macrolide/quinolone	
	○ NSAID + CKD	○ ≥2 anticholinergics (*Anticholinergic Burden Tool*)	

Step 6: Cost-effectiveness

Check for		
○ Costly formulations (e.g. dispersible)	○ Branded products	○ Unsynchronised dispensing intervals (28 or 56 day supplies)
○ Costly unlicensed 'specials'	○ >1 strength or formulation of same drug	

Step 7: Adherence/patient centredness

Check Self-Administration (Cognitive)	Check Self-Administration (Technical)	
○ Warfarin/DOACs	○ Inhalers	○ Any other devices
○ Anticipatory care meds e.g. COPD	○ Eye drops	○ Bisphosphonates/calcium
○ Analgesics		
○ Methotrexate		
○ Tablet burden		

Barriers to stopping medicines

Personal barriers

- Confidence to stop
- Time pressures
- Resources
- Patient expectations
- Different healthcare professionals to stop medicines have different priorities re stopping medicines
- Not confident in all areas
- Pressure patient/carers
- Lack of evidence
- Worry about causing harm
- Time to think and do it well
- Difference of opinion with/to colleagues
- Lack of knowledge/information resource
- Specific medications – potential harm
- Not really knowing what patient is doing with their medications
- Records: Why drug started? Working in the dark
- Repeat processes
- Time: medication reviews 'hijacked'
- Fear of causing harm: stop medications and then an event happens/peers wouldn't support your decision
- Fear of litigation
- Individuals' knowledge – so much to keep up to date with

Environmental barriers

- Transfers of Care -medicines reconciliation
- Aging population with multi morbidities
- QOF. Targets driving action
- Lack of time
- Lack of expertise/evidence
- Fear of consequences
- Lack of process in primary care
- Patient expectations/Family pressure
- High proportion of nursing homes
- Multiple prescribers for 1 individual
- Conflicting information – quality/source
- Specialist prescribing
- Training needs – both existing and new pharmacists
- Pain prescribing and pathways
- Checklist prescribing
- Single condition focus
- Blame game
- Medical advancement – more and more drugs
- Patient Confidence – multiple clinicians – patient confusion
- Communication pathways
- Prescriber confidence
- Media influences

Bringing it all together

NHS North East Hampshire and Farnham Clinical Commissioning Group

Polypharmacy: getting the balance right

ePACT2 Step 1: review your data and identify key areas for your PCN/ practice

Step 2: Think about your skill mix and capacity. Think about how many session you have for Multimorbidity structured medication reviews.

Step 3: Request the NHS numbers of the patients that the NHS BSA data shows make up the comparator you have decided to focus on. (could be volume, could be therapeutic) **nhsbsa.informationsystems@nhs.net.**

Step 4: Triage the list, some patients may have been seen already, prioritise e.g older, not been seen recently, in a care home, overdue blood test.

Step 5: Carry out shared decision-making structured medication reviews.

Step 6: Review the polypharmacy data. What has been your impact? What did you learn?

ePACT2

Learning resources

Polypharmacy: getting the balance right

Resources

Resources include

- This Slide Deck.
- The Presenter Notes.
- The editable feedback slide deck.
- The Case Study.
- Patient facing shared decision-making tools and information leaflets e.g. Me and My Medicines, Are the Medicines Working for you and 5 Moments of Medication Safety.

NHS BSA Polypharmacy Comparators

To access your data go to:

nhsbsa.nhs.uk/epact2/dashboards-and-specifications/medicines-optimisation-polypharmacy

For more information about the AHSN National Polypharmacy Programme and to connect with your local Polypharmacy Lead click **here**.

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