Wessex Academic Health Science Network

Polypharmacy Action Learning Sets
GP Practice Learning.

2021

Wessex Academic Health Science Network

Designed, developed and delivered by:

Wessex Academic Health Science Network

NHS
Health Education England

and

One less pill

FORMULA ZOE GIRDIS

These slides are only to be used for cascade training by attendees of the Polypharmacy Action Learning Sets

Agenda

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01 Size and scale of Polypharmacy.

02 What are we doing about it?

03 Strategic and policy context.

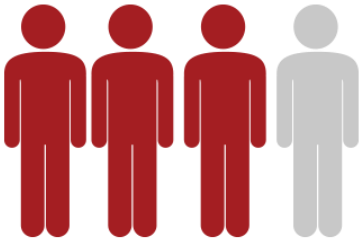
04 Technical and behavioural elements to addressing problematic Polypharmacy.

05 Tools and further support.

Size and Scale of Polypharmacy

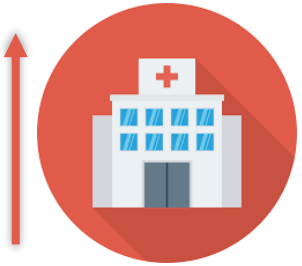
Medicines are intended to help patients but they can cause harm…

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

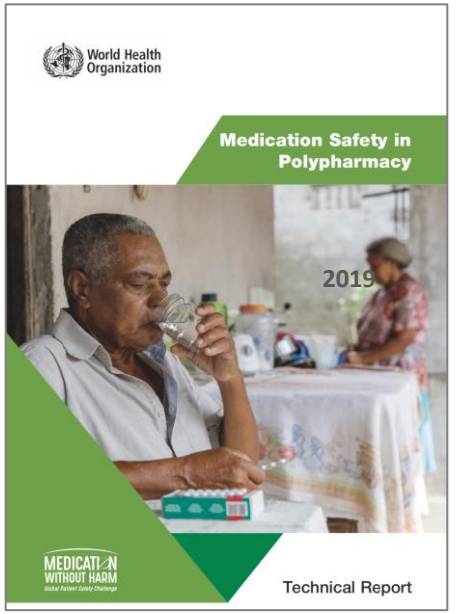
We dispense over 1 billion prescription items per year in Primary care in England

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

02 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**".

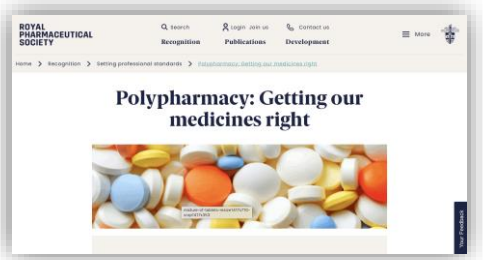


IT'S A BIG CHALLENGE AND GROWING

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?

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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

What does the tool look like?

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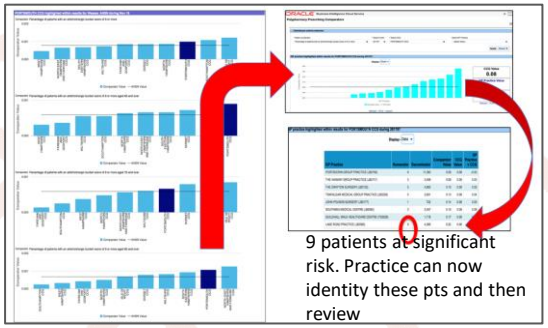
STEP 1 Know your data.

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

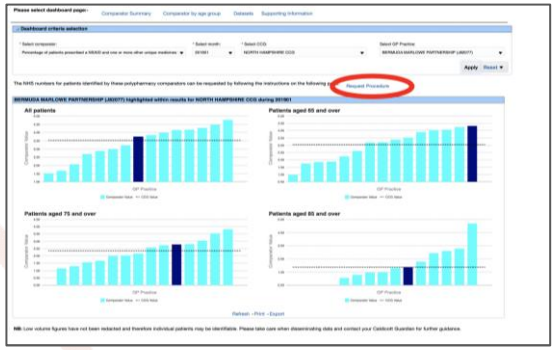
Portsmouth CCG percentage of patients with Anticholinergic Score of 9 or more



9 patients at significant risk. Practice can now identity these pts and then review

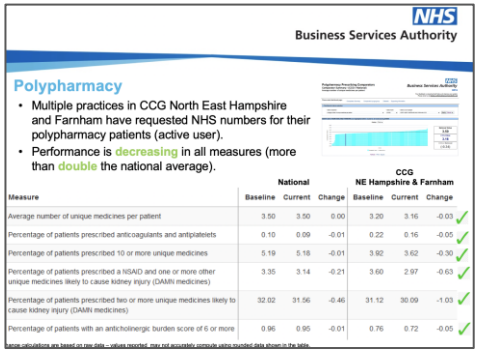
STEP 2 Find patients at risk.

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

Polypharmacy prescribing comparators in action:

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What do the comparators measure?

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The **average number** of unique medicines prescribed per patient

Percentage of patients **prescribed multiple anticoagulant regimes**

Patients prescribed 4,5 or 6 (or more) medicines with **low to moderate and moderate to high anticholinergic activity**

Patients concurrently prescribed 5 or more analgesics

Patients prescribed 2,3, 4 or more medicines with an unwanted hypotensive effects

Volume comparators

Clinical/ therapeutic comparators

Percentage of patients prescribed **8 or more** unique medicines, **10 or more** unique medicines, **15 or more** unique medicines, **20 or more** unique medicines

Percentage of older patients prescribed medicines **likely to cause Acute Kidney Injury** (DAMN Drugs)

Percentage of patients **prescribed a NSAID and one or more other unique medicines likely to cause kidney injury** (DAMN medicines)

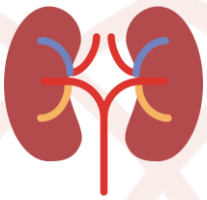
Patients prescribed and SSRI or and SNRI concurrently with other medicines known to increase the risk of bleeding.

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 and

700 fewer patients prescribed two or more anticoagulants and antiplatelet medicines

A Case Study

NHS North East Hampshire and Farnham Clinical Commissioning Group
Academic Health Science Network

- 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…

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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.

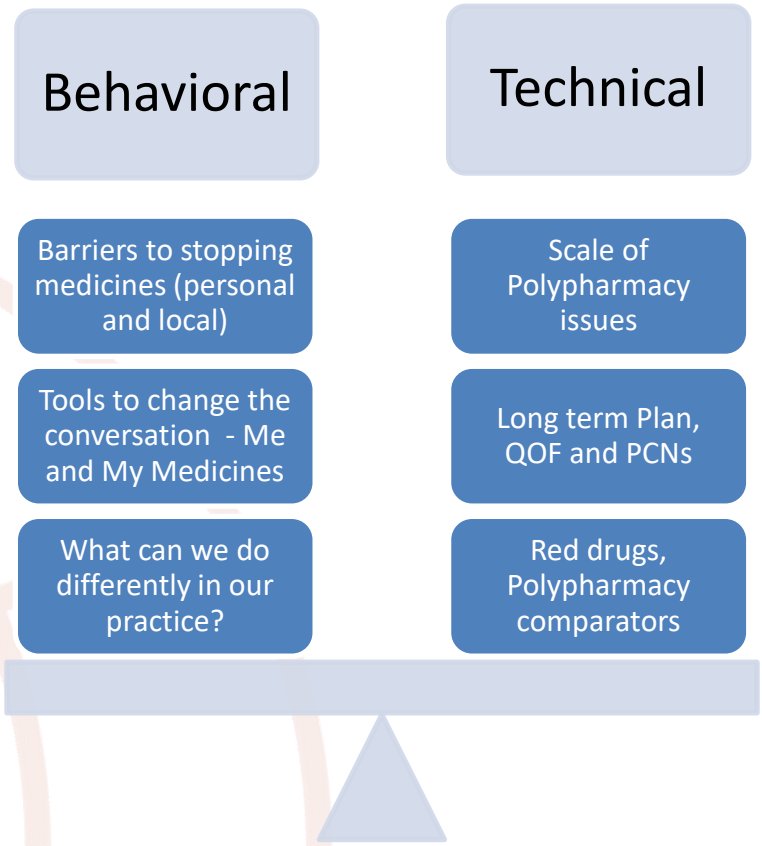
Victim or villain?

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 behavioral change and technical knowledge.



Designers to convert to better picture

Behavioural tools to address problematic polypharmacy

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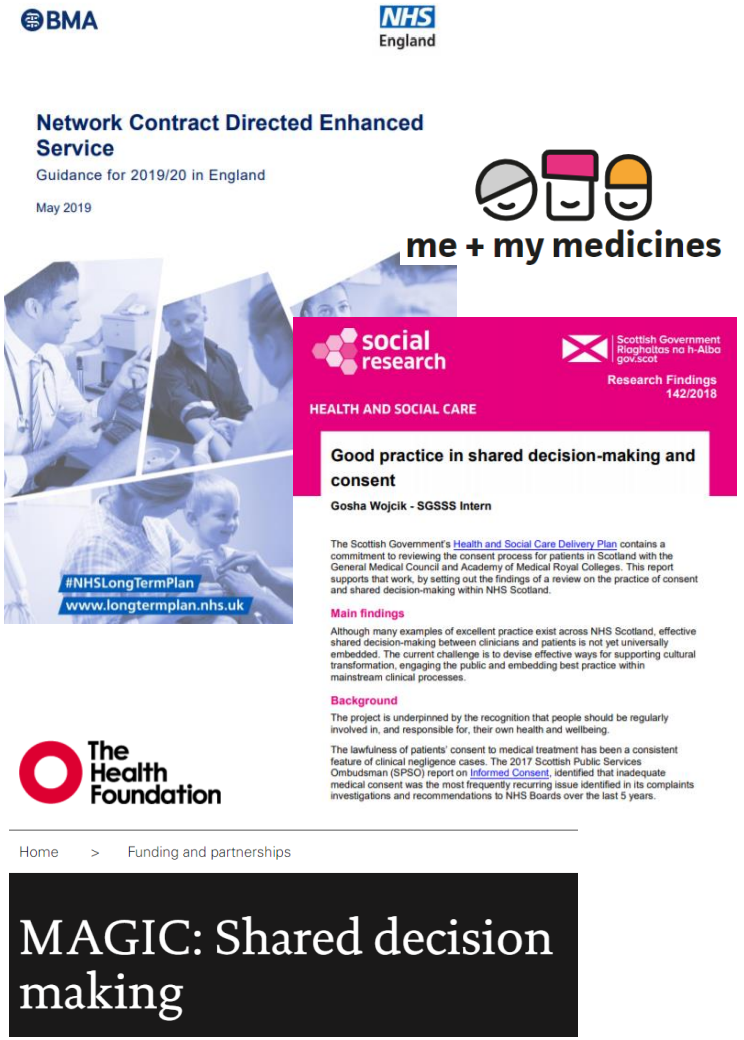
- Firstly, you can't be expected to do good shared decision making in a 7-minute consultation
- No single tool can fix this
- Change is about moving towards shared decision making over time
- Working together as GPs and Patients to learn how to do this together
- There are ways to make shared decision-making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



Technical tools to address problematic polypharmacy

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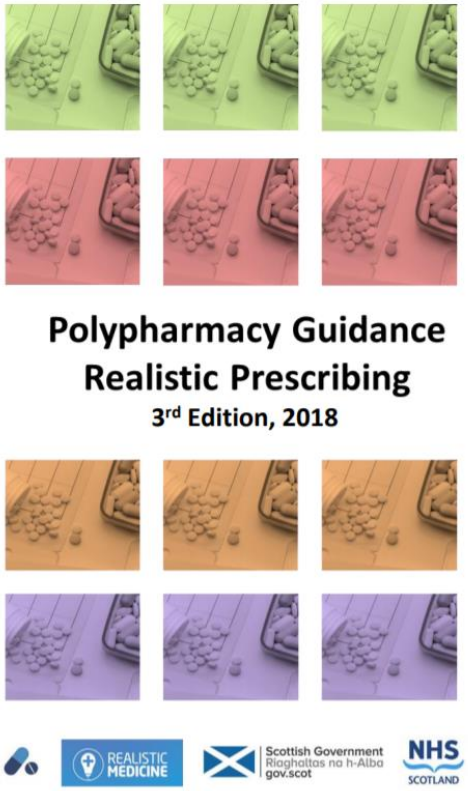
01 Scottish Polypharmacy Guidance: Realistic Prescribing 2018



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

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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

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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

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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
- Electronic BNF
- Electronic tools/different IT tools
- 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

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

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Resources

Resources include

- This Slide Deck.
- The Presenter Notes.
- The editable feedback slide deck.
- The Case Study.
- MMM resources
- A digital copy of the take home Maltese Cross

NHS BSA Polypharmacy Comparators

To access your data go to:

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

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