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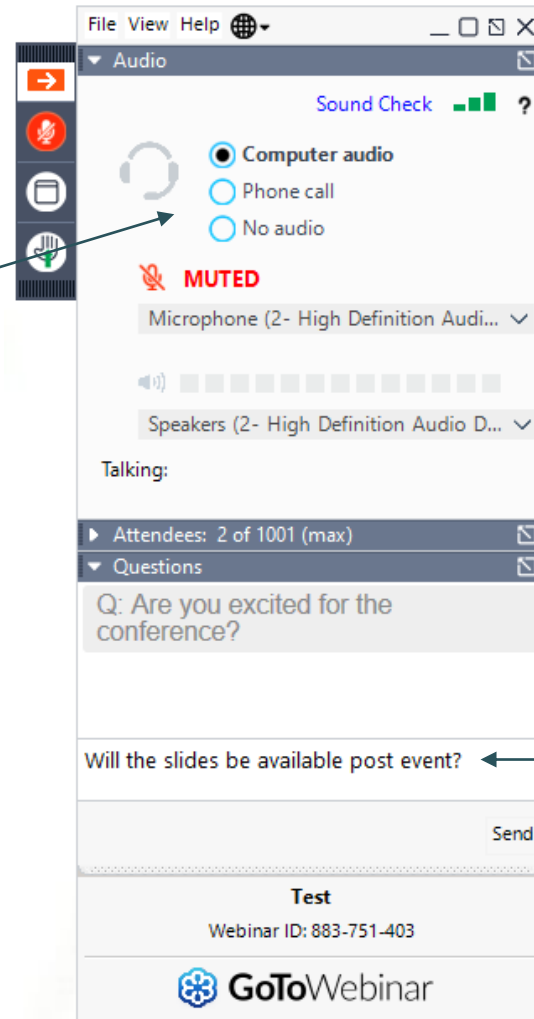
Wednesday 30th November 2022- 10:50am – 13:30pm – GoTo Webinar  
Conference hosted by Convenzis Group Limited



# NHS Medicines Optimisation Conference 2022



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# NHS Medicines Optimisation Conference 2022



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# NHS Medicines Optimisation Conference 2022



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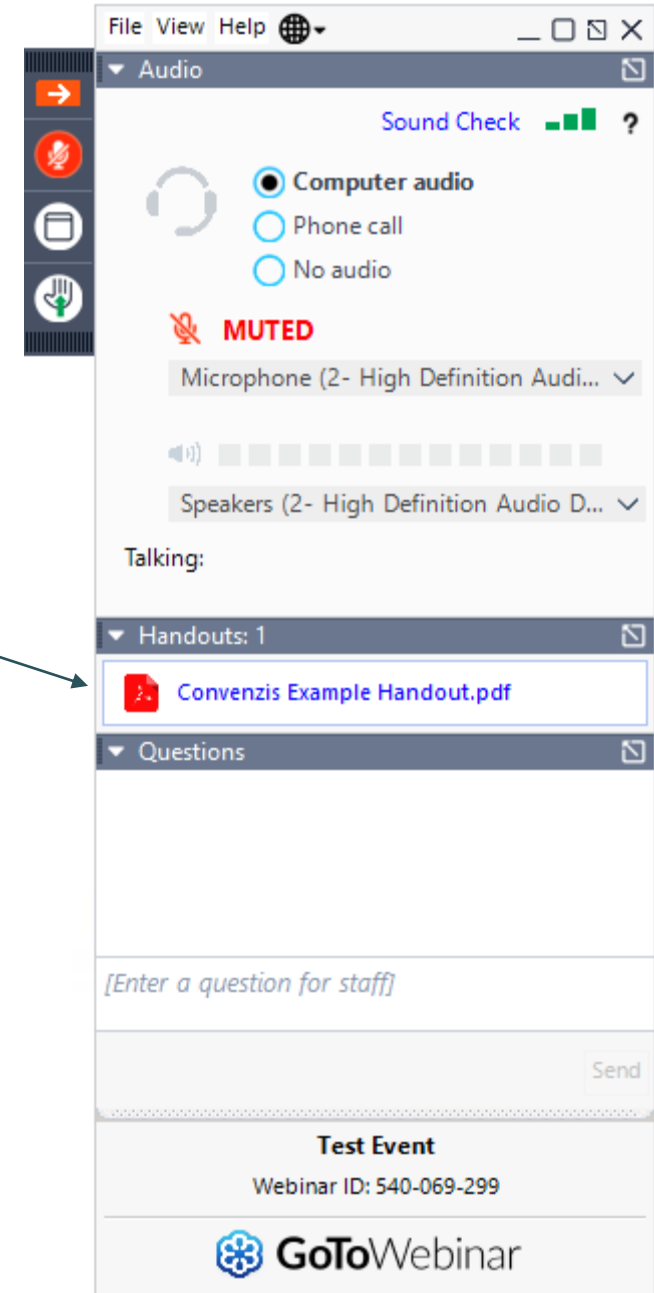
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# NHS Medicines Optimisation Conference 2022



## SPEAKING NOW



Michael Scott

Director - Medicines Optimisation Innovation Centre  
Northern Ireland

I will be discussing...

“Medication Review - The  
Isimpathy Project”

moic

Medicines Optimisation Innovation Centre



Smarter Medicines Better Outcomes

Smarter



# ISIMPATHY Project - Medicines Use Review

Professor Michael Scott

Director MOIC

Medicines Optimisation Conference

30 November 2022

Smarter Medicines Better Outcomes



# MOIC Work Themes



Smarter Medicines Better Outcomes

- › Focus needs of NI population
- › Accelerate adoption of innovation into practice to improve patient outcomes and experiences
- › Build culture of partnership and collaboration
- › Make meaningful contribution to NI economy

Smarter Medicines Better Outcomes



# EU Population is getting older

Year	2016	2070
Total Population	511 million	520 million
Working age	333 million	292 million
Old age dependency ratio(>65/45-64)	29.6%	51.2%
Working age ratio	3.3	2.0

# Medicines Related Statistics


- 8.6 million unplanned hospital admissions are caused by adverse drug events in Europe each year
- 50% of hospital admissions due to adverse drug events are preventable
- 75% of these are in patients over 65 years of age and on 5 or more medicines



# Polypharmacy-some statistics (Mair et al Journal of Integrated Care 2020)

- Twenty percent of people with two chronic conditions took between 4 and 9 medicines daily and around 10% took over 10 medicines daily
- European citizens over the age of 65 will rise from 18% in 2013 to 28% by 2060
- The over 80s will increase from 5% to 12 % over the same period
- Polypharmacy is a key risk factor for frailty with the association increasing from 55% for those prescribed more than 4 medicines to 147% for those taking more than 7 medicines





# Ensuring the best medication outcomes for patients

iSIMPATY, (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence Through the Years), a three year EU funded project in Northern Ireland, Scotland and the Republic of Ireland. The project aims to ensure the best and most sustainable use of medicines for patients by training pharmacists and other medical professionals to deliver medicine reviews and embedding a shared approach to managing multiple medicines.



# Stimulating Innovation Management of Polypharmacy and Adherence in the Elderly

**Cathy Harrison**

**EIP AHA Conference of Partners**

**10th December 2015**

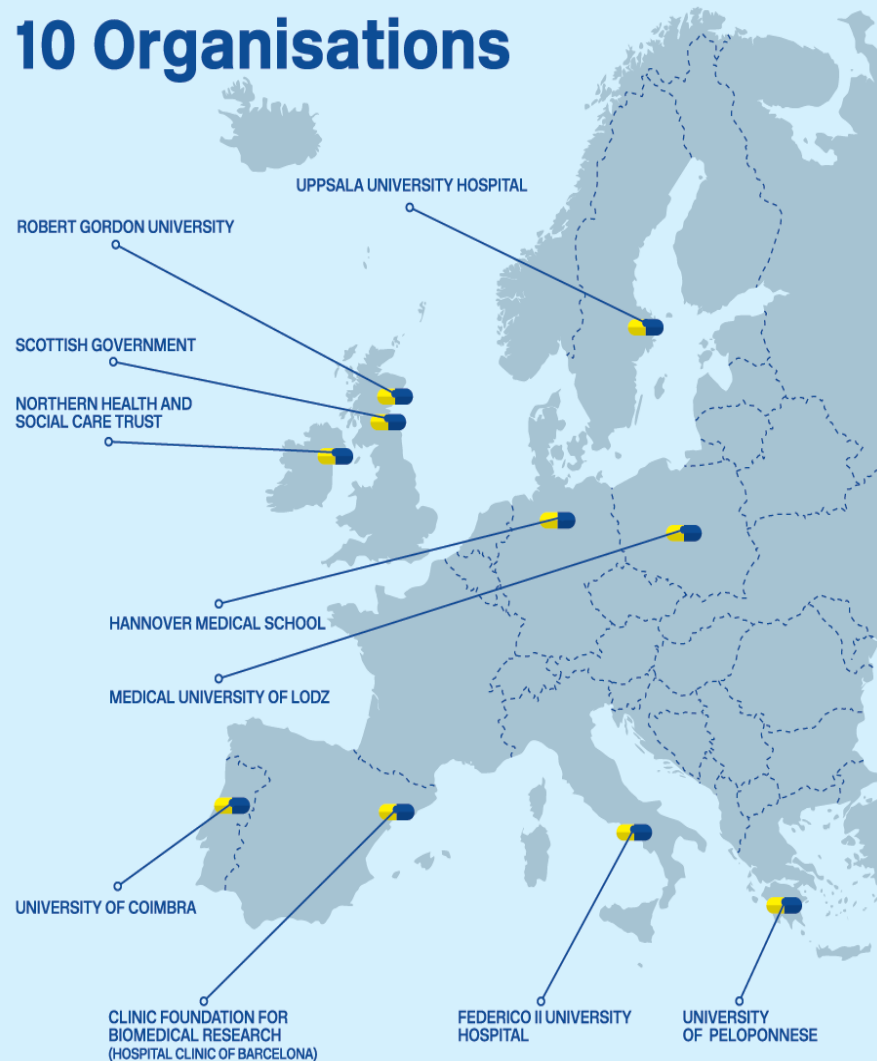


Co-funded by  
the Health Programme  
of the European Union

This presentation is part of the SIMPATY project (663082) which has received funding from the European Union's Health Programme (2014-2020)

# CONSORTIUM AND OBJECTIVES

## 10 Organisations

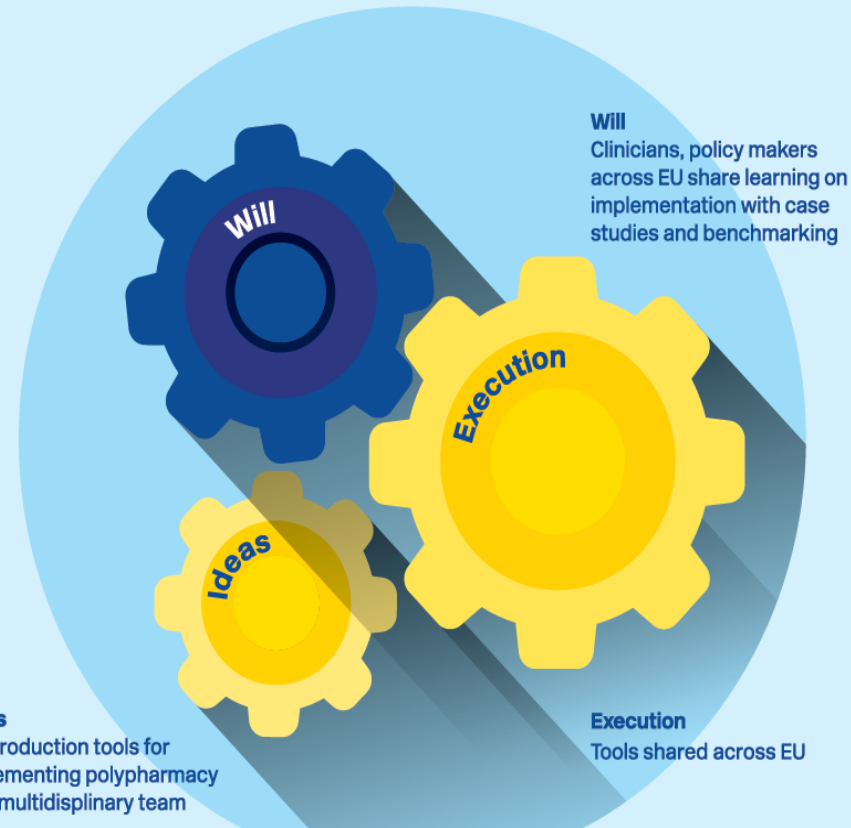


[www.simpathy.eu](http://www.simpathy.eu)

## Inappropriate Polypharmacy A Major Health Issue

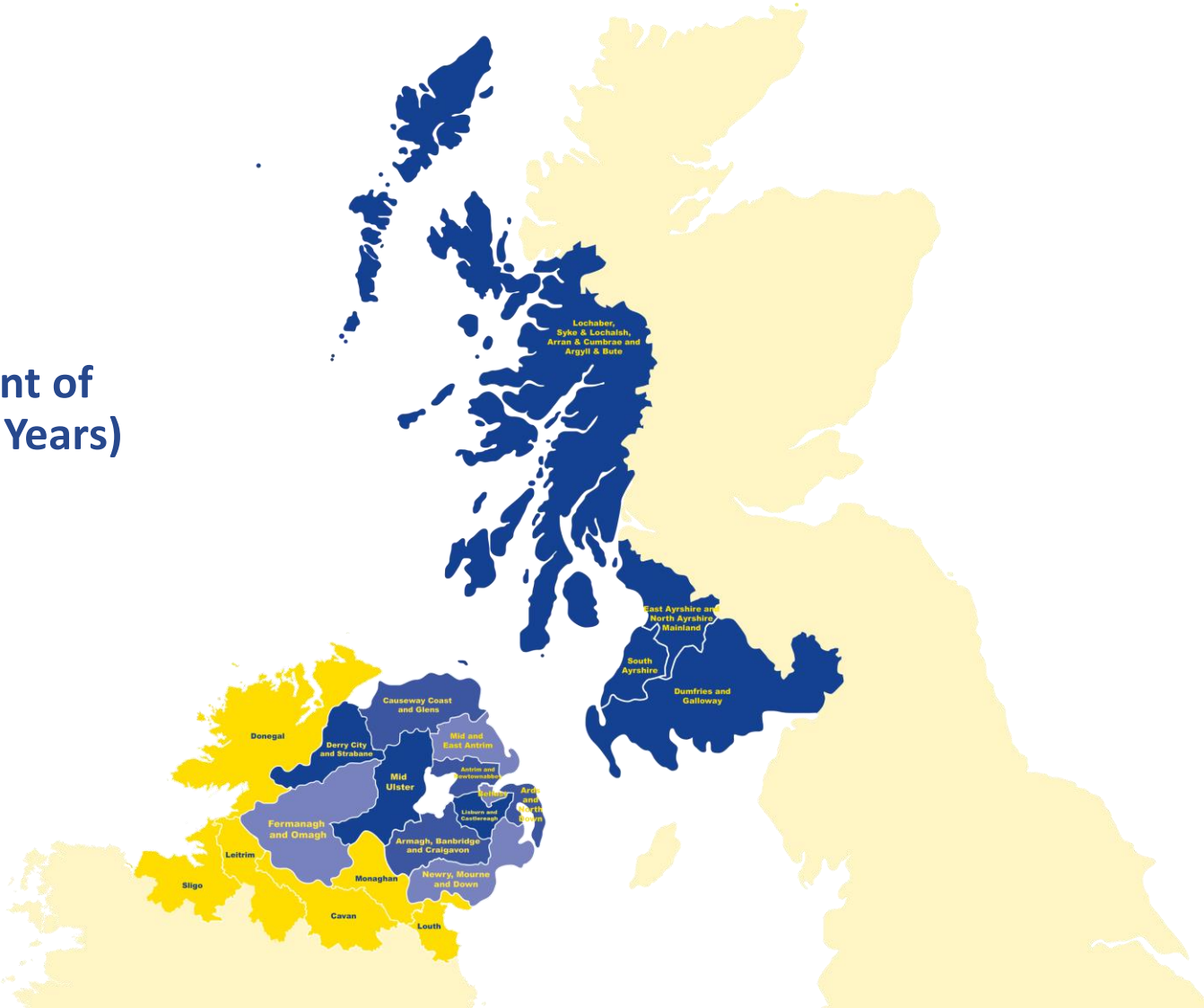
50% of the people taking 4 or more medicines don't take them as prescribed.

Changing the approach to multiple prescriptions requires a "collective" and joint effort involving different stakeholders.



# Overview of iSIMPATY project

(Implementation of Stimulating Innovation in the Management of Polypharmacy & Adherence Through the Years)



A project supported by the European Union Interreg VA Programme, managed by the Special European Programme Body (SEUPB)

# What is iSIMPATHY?

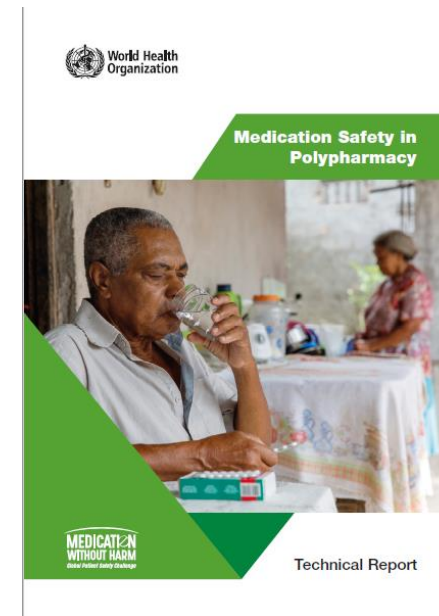
- iSIMPATHY is a 3-year EU funded project (2019 – 2022)
- Operates in Northern Ireland, Scotland and the border areas of the Republic of Ireland (Donegal, Sligo, Leitrim, Cavan, Monaghan and Louth)
- NI- hospital based
- Scotland and ROI- GP practice based



# Aims of iSIMPATHY

- To make a significant contribution towards the embedding of a single approach for polypharmacy management and adherence across the three jurisdictions

- WHO Medication Without Harm (2017) 3 key areas
  - medication safety in high-risk situations
  - **medication safety in polypharmacy**
  - medication safety in transitions of care.



# How?

- Delivering Polypharmacy Medicine reviews  
(15,000 patients across the three project jurisdictions in Primary and Secondary care) (10.5 pharmacists)
- Delivering training  
(120 GPs, hospital doctors and pharmacists - 40 in each jurisdiction)
- Cross border collaboration

# 7 STEPS TO APPROPRIATE POLYPHARMACY



Step 1: What matters to the patient

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Step 2: Identify essential drug therapy

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Step 3: Does the patient take unnecessary drug therapy?

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Step 4: Are therapeutic objectives being achieved?

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Step 5: Is the patient at risk of ADRs or suffers actual ADRs?

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Step 6: Is drug therapy cost-effective?

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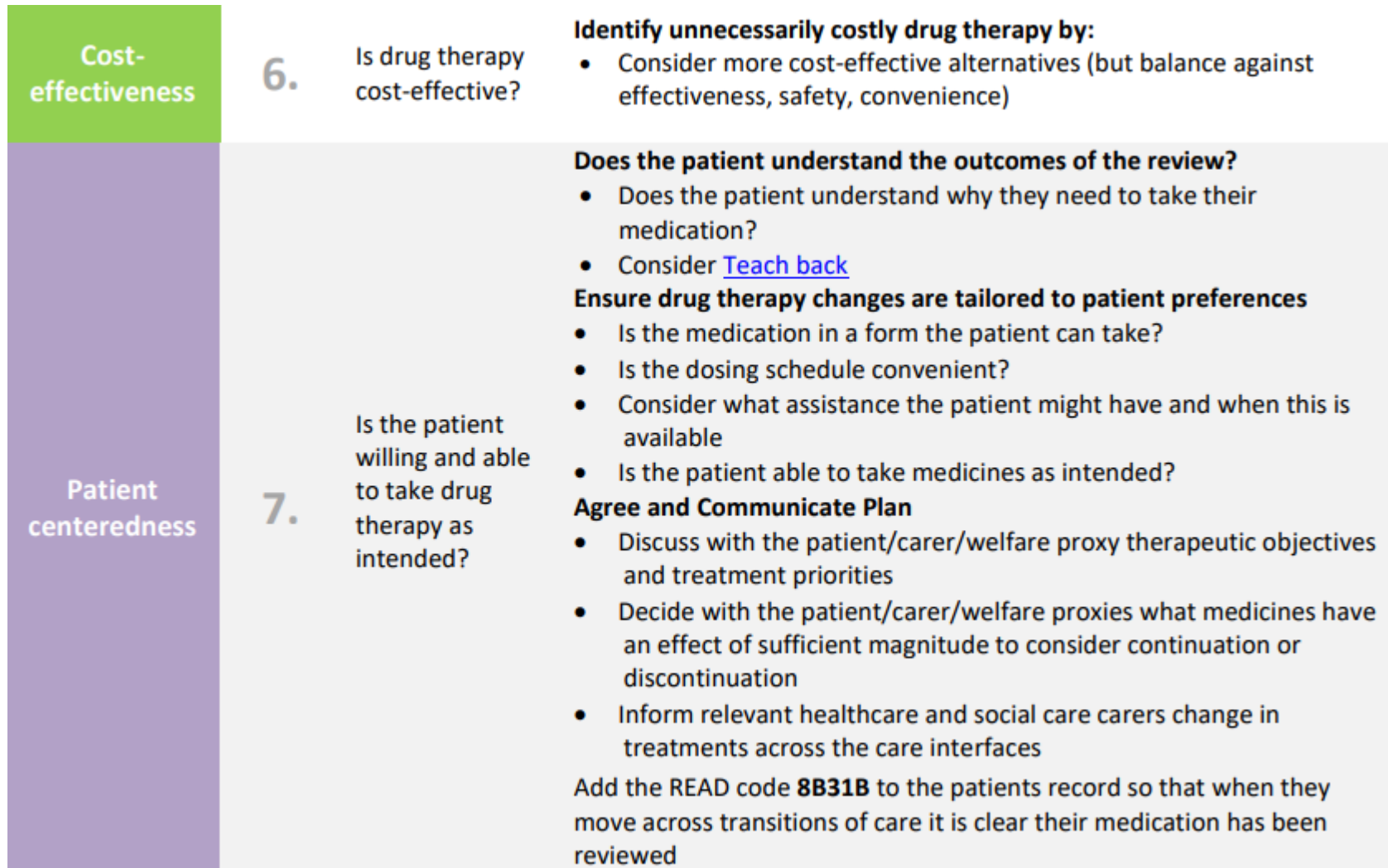
Step 7: Is the patient willing and able to take drug therapy as intended?



# 7 STEPS medicine review tool

Domain	Step (7 steps)
Aims	1. What matters to the patient?
Need	2. Identify essential drug therapy.
	3. Does the patient take unnecessary drug therapy?
Effectiveness	4. <u>Are therapeutic objectives being achieved?</u>
Safety	5. Does the patient have ADR/Side effects or are they at risk of ADRs/Side effects? Does the patient know what to do if they are too ill?
	6. Is drug therapy cost-effective?
Patient Centeredness	7. <u>Is the patient willing and able to take drug therapy as intended?</u>

Domain	Steps	Process
Aims	1. What matters to the patient?	<p><b>Review diagnoses and identify therapeutic objectives with respect to:</b></p> <ul style="list-style-type: none"> <li>• What matters to me (the patient)?</li> <li>• Understanding of objectives of drug therapy</li> <li>• Management of existing health problems</li> <li>• Prevention of future health problems</li> </ul>
Need	2. Identify essential drug therapy	<p><b>Identify essential drugs (not to be stopped without specialist advice):</b></p> <ul style="list-style-type: none"> <li>• Drugs that have essential replacement functions (e.g. levothyroxine)</li> <li>• Drugs to prevent rapid symptomatic decline (e.g. drugs for Parkinson's disease, heart failure)</li> </ul>
	3. Does the patient take unnecessary drug therapy?	<p><b>Identify and review the (continued) need for drugs:</b></p> <ul style="list-style-type: none"> <li>• With temporary indications</li> <li>• With higher than usual maintenance doses</li> <li>• With limited benefit in general for the indication they are used for</li> <li>• With limited benefit in the patient under review (See: <a href="#">Drug Efficacy (NNT)</a> table)</li> </ul>
Effectiveness	4. Are therapeutic objectives being achieved?	<p><b>Identify the need for adding/intensifying drug therapy in order to achieve therapeutic objectives:</b></p> <ul style="list-style-type: none"> <li>• To achieve symptom control</li> <li>• To achieve biochemical/clinical targets</li> <li>• To prevent disease progression/exacerbation</li> </ul>
Safety	5. Does the patient have ADR/Side Effects or is at risk of ADRs/Side Effects?	<p><b>Identify patient safety risks by checking for:</b></p> <ul style="list-style-type: none"> <li>• Drug-disease interactions</li> <li>• Drug-drug interactions (see <a href="#">Cumulative Toxicity</a> tool)</li> <li>• Robustness of monitoring mechanisms for high-risk drugs</li> <li>• Drug-drug and drug-disease interactions</li> <li>• Risk of accidental overdosing (<a href="#">Yellow Card Scheme</a>)</li> </ul>
	Does the patient know what to do if they're ill?	<p><b>Identify adverse drug effects by checking for</b></p> <ul style="list-style-type: none"> <li>• Specific symptoms/laboratory markers (e.g. hypokalaemia)</li> <li>• Cumulative adverse drug effects (see <a href="#">Cumulative Toxicity</a> tool)</li> <li>• Drugs that may be used to treat ADRs caused by other drugs (<a href="#">Sick Day Rule</a> guidance can be used to help patients know what do with their medicines if they fall ill)</li> </ul>



# iSIMPATY Patient Cohort

Suitable patients for an iSIMPATY review are those admitted to the NHSCT who meet one or more of the following criteria:

- Prescribed 10 or more regular medicines
- Adults of any age, approaching the end of their life due to any cause, to include adults with frailty
- Aged 50 years and older and resident in a residential care setting e.g. nursing home, intellectual disability residential setting or community hospital
- On medication or combinations considered particularly High-Risk for adverse events such as bleeding, acute kidney injury and falls (as defined by the Scottish Polypharmacy Case Finding indicators)

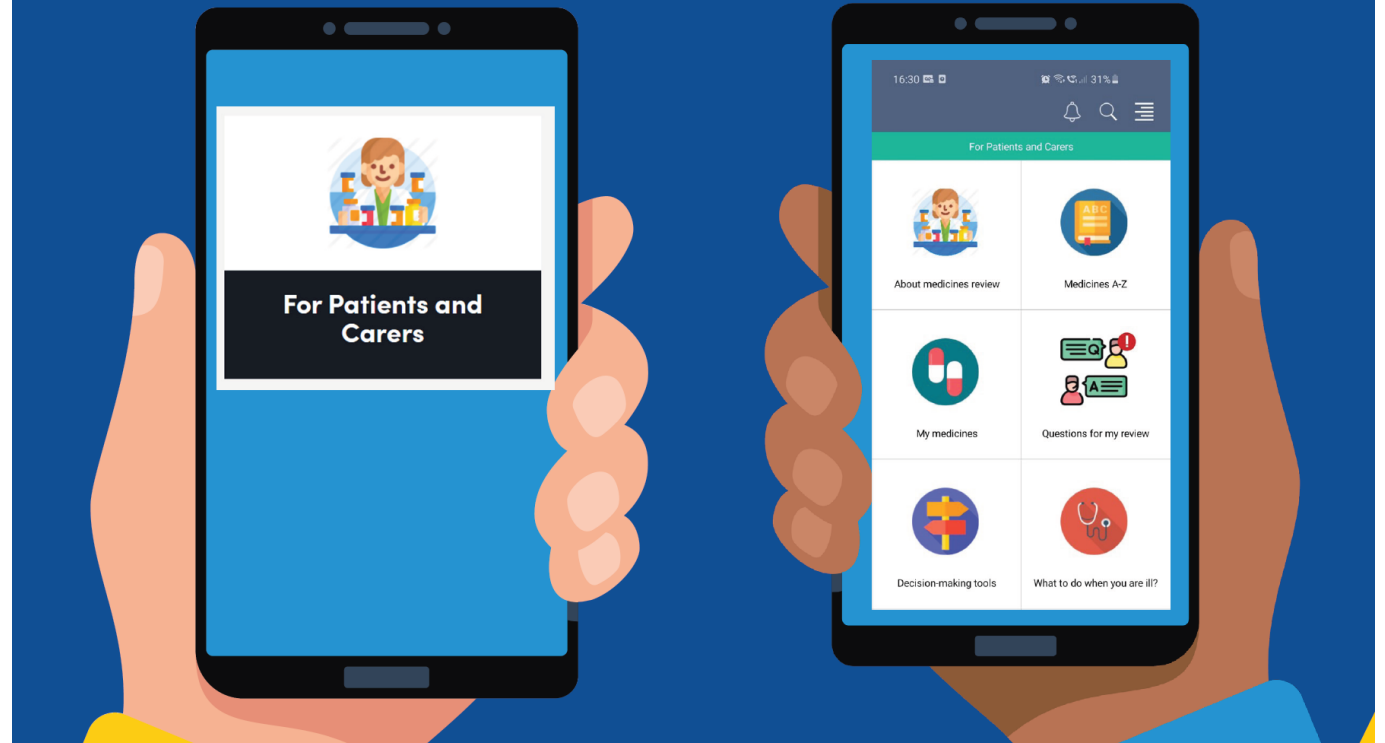


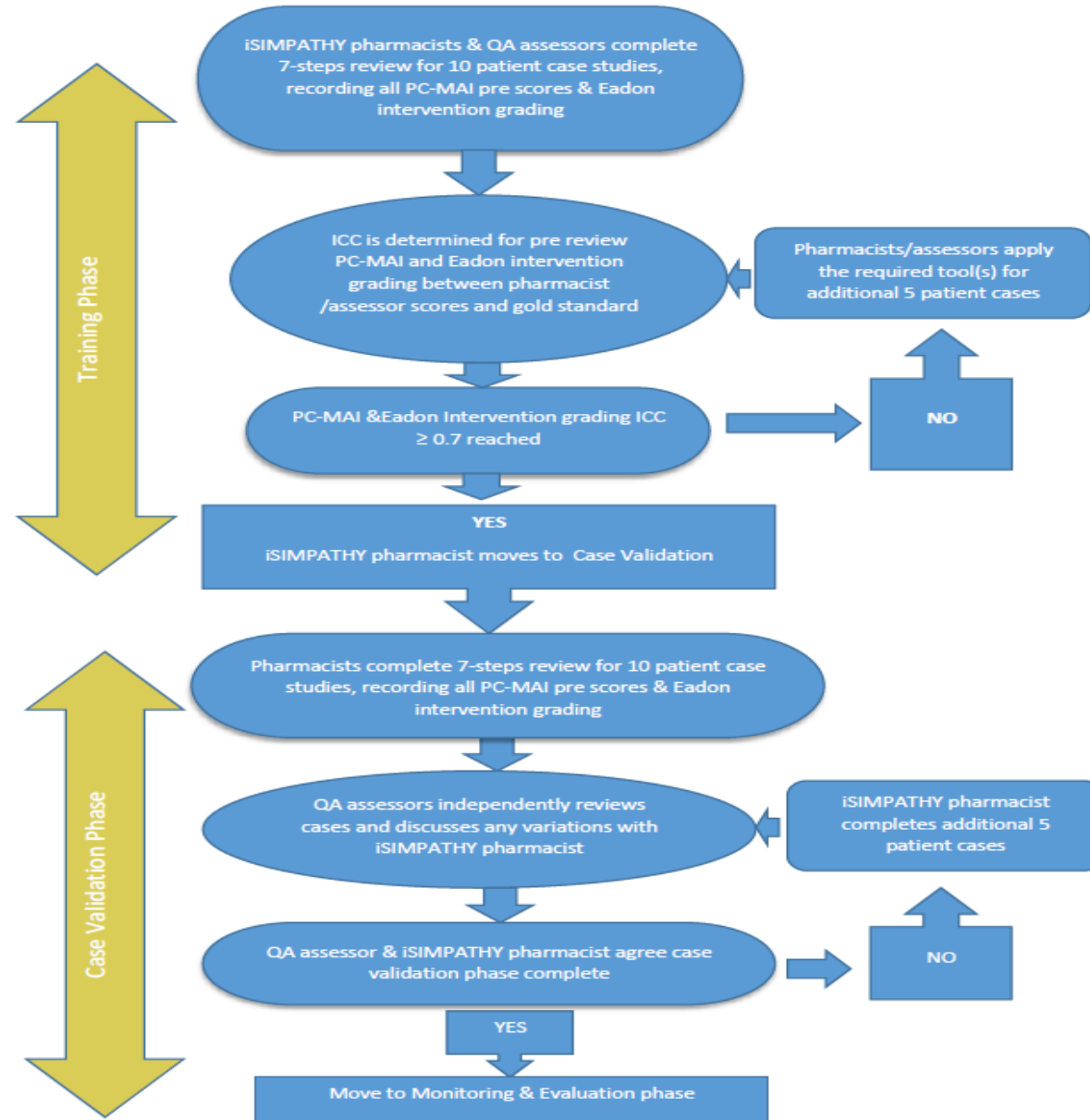
# Robust evaluation

- Data collection
- Interventions (Eadon)
- Medication appropriateness index (PC-MAI)
- Patient reported outcome measures (PROMS)
- Economic analysis

## Supporting reviews with the Manage Medicines app

The [Manage Medicines app](#) is a key way to support the medicines reviews process. With easy to navigate toolkits for both professionals and patients or carers, the app also lets patients answer questions ahead of their reviews. As well as giving practitioners this information in advance, it helps patients get the most out of their medicines reviews. Look out for our short animation explaining the app and the PROMs (Patient Reported Outcomes Measures) questionnaire coming soon on our website and twitter.





# Training

Royal College of Physicians (RCP)  
accredited HCPs (TURAS)

<https://learn.nes.nhs.scot/59670/isimpathy-evidence-based-polypharmacy>



## Modules:

### ONE – Why should we address Polypharmacy

- Definition and dangers of Polypharmacy
- Medication Adherence
- Adverse Drug reactions
- Criteria for selection for Polypharmacy reviews
- Short introduction to the '7 step' medication review process

### TWO – 7 Steps Methodology

- The 7 Step Medication review process
- Numbers Needed to Treat
- The 7 steps review process in practice
- High risk medicines combinations

### THREE – Change Methodology and Numbers Needed to Treat

- Implementing Change Methodology,
- Case study example of the 7 steps in practice
- 'Understanding NNT's' - Numbers Needed to Treat

# Project ECHO (Extending Community Health Outcomes) - Education & shared learning

Presentation Date	Curriculum/Education Topic
27 May 2021	Numbers Needed to Treat for Hard Pressed Pharmacists
24 June 2021	Skills & Tools to Manage Difficult Conversations
23 September 2021	Pain Management in the Frail
21 October 2021	A Day in the Life of the iSIMPATHTY Pharmacist – 3 nations
25 November 2021	High Risk Combinations in relation to anti-thrombotics
16 December 2021	Tapering of Antidepressants – generically psychoactive agents
27 January 2022	Parkinson's Disease & minimising the risk of falls
24 February 2022	Maximising the Impact of the Consultation
24 March 2022	Issues Surrounding Diabetes / Cardio Metabolic issues



# Eadon Scale

Intervention	Grade
Intervention is detrimental to patient's well-being	1
Intervention is of no significance to patient care	2
Intervention is significant but does not lead to an improvement in patient care	3
Intervention is significant and results in an improvement in the standard of care	4
Intervention is very significant and prevents a major organ failure or adverse reaction of similar importance	5
Intervention is potentially life saving	6

# Early Findings

Average number of interventions per patient	9.1
Percentage Grade 4 and above (%)	92.7%
Percentage Grade 5 (%)	4.86%
Percentage Grade 6 (%)	0.07%
Reduction in pcMAI score (5)	86%
Number of medicines before review	12.4
Number of medicines after review	12.4

# Early Findings (2)

- Patient post stroke, no alcohol intake in notes, iSIMPATHY R/V: 50-60 units/week, commenced on Pabrinex and Chlordiazepoxide
- Patient on tamsulosin and doxazosin. Tamsulosin stopped by GP several months ago. When prompted that usually not taken together patient remembered GP pharmacist told him to stop tamsulosin
- Patient on Targinact prescribed BD on NIECR. Patient took at night to help sleep. No indication for pain, weaned to stop
- Patient gets 2 weekly District Nurse INRs on warfarin for AF since 2013: changed to DOAC

# What patients say...



'The service and empathy I received from the hospital chemist was very comforting. She was able to help me understand how the medication I would need would benefit my health. At the moment my health has improved and the medication I have been given has served their purpose well. Thank you for your help.'

'No one has ever sat down with me and taken time to go through all my medicines with me'

'It means so much to me to be involved in decisions about my brother's care. He is non-verbal and I do everything for him'

'A wonderful person. It was the first time anyone ever listened and understood what I was coping with and helped me in so many ways. I wish you all the very best in your job'

'The pharmacist I spoke to was so friendly and helpful reassuring me with regard to my medication. My health has certainly improved as I understood more about any medicines I was taking. She explained what the tablets were for and why each dosage was being given. I would highly recommend this service to anyone'

# Find out more...



**iSIMPATHY project**

[www.isimpathy.eu/](http://www.isimpathy.eu/)



@iSIMPATHY

**Medicine review training (TURAS)\***

<https://learn.nes.nhs.scot/59670/isimpathy-evidence-based-polypharmacy>

**Effective Prescribing & Therapeutics Division**

[www.therapeutics.scot.nhs.uk](http://www.therapeutics.scot.nhs.uk)

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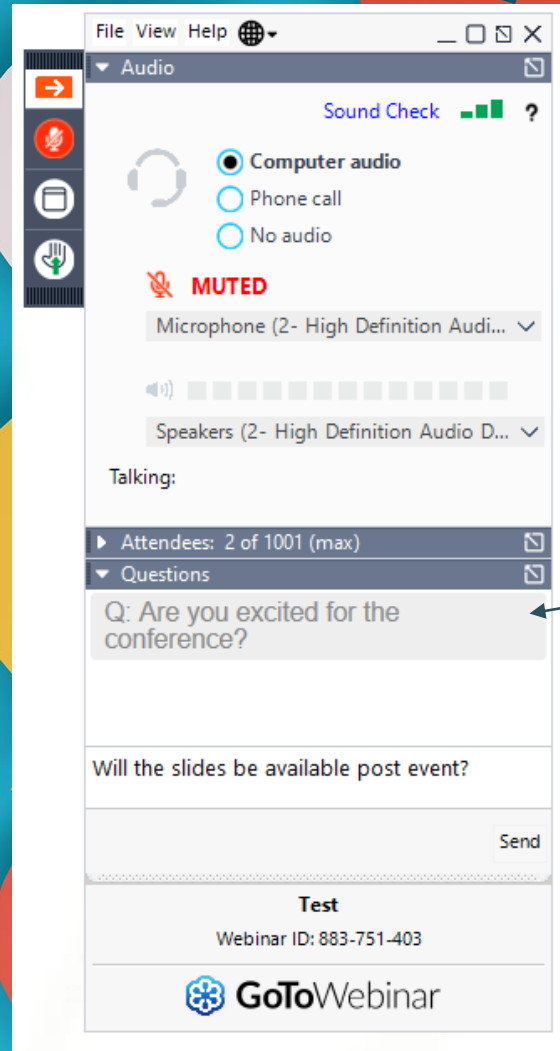
[www.themoic.hscni.net](http://www.themoic.hscni.net)



@moicni

# Contact details

- <https://www.isimpathy.eu/>
- [@iSIMPATHTY](https://twitter.com/iSIMPATHTY)
- <https://themoic.hscni.net/news-media/>
- [Drmichael.scott@northerntrust.hscni.net](mailto:Drmichael.scott@northerntrust.hscni.net)
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# NHS Medicines Optimisation Conference 2022



**UP NEXT...**

***Baxter***





# NHS Medicines Optimisation Conference 2022



## SPEAKING NOW




Ann Cole

Value Solutions Consultant  
Baxter Healthcare Limited

I will be discussing...

“Collective Intelligence to  
Support OPAT expansion”

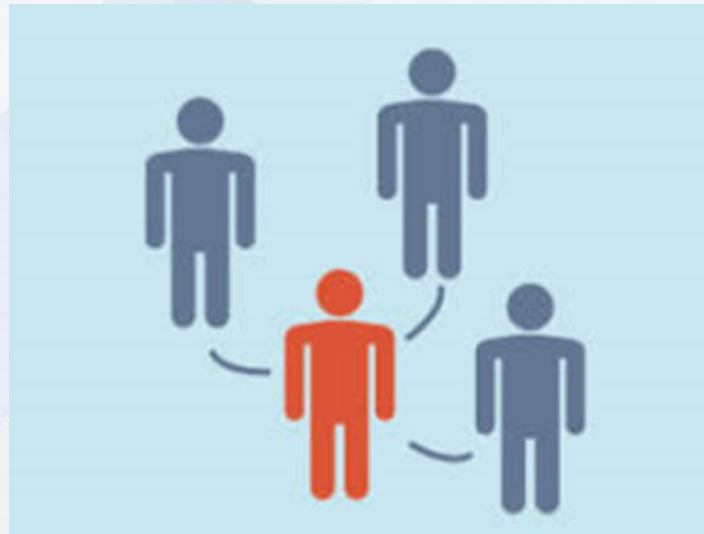


# Collective Intelligence to support OPAT Expansion

Ann Cole  
Value Solutions Lead  
Baxter Healthcare Limited

30<sup>th</sup> November 2022

**Collective Intelligence** is a shared or group intelligence that emerges from the collaboration, collective efforts and competition of many individuals<sup>1</sup>



*Partnering for patient  
centric sustainable  
healthcare*

# Key Conditions that Drive Value

#SCANHEPS18

System Intelligence:  
Clinician expertise,  
outcomes focused,  
shared risk, partnership  
with vendors

Market Intelligence:  
Expertise in market  
intelligence informs  
solutions, scales to new  
markets

Solutions  
informed by  
Patient  
outcomes,  
made possible  
by Vendor  
Partnerships

Shared Accountability

Health Organization Team

Vendor Community

24



# The NHS is facing a large backlog of non-COVID-19 care

The NHS faces a  
challenging  
backlog of...



**7m**  
elective  
Procedures<sup>2</sup>  
with

**2.75m**  
waiting over 18  
weeks<sup>2</sup>

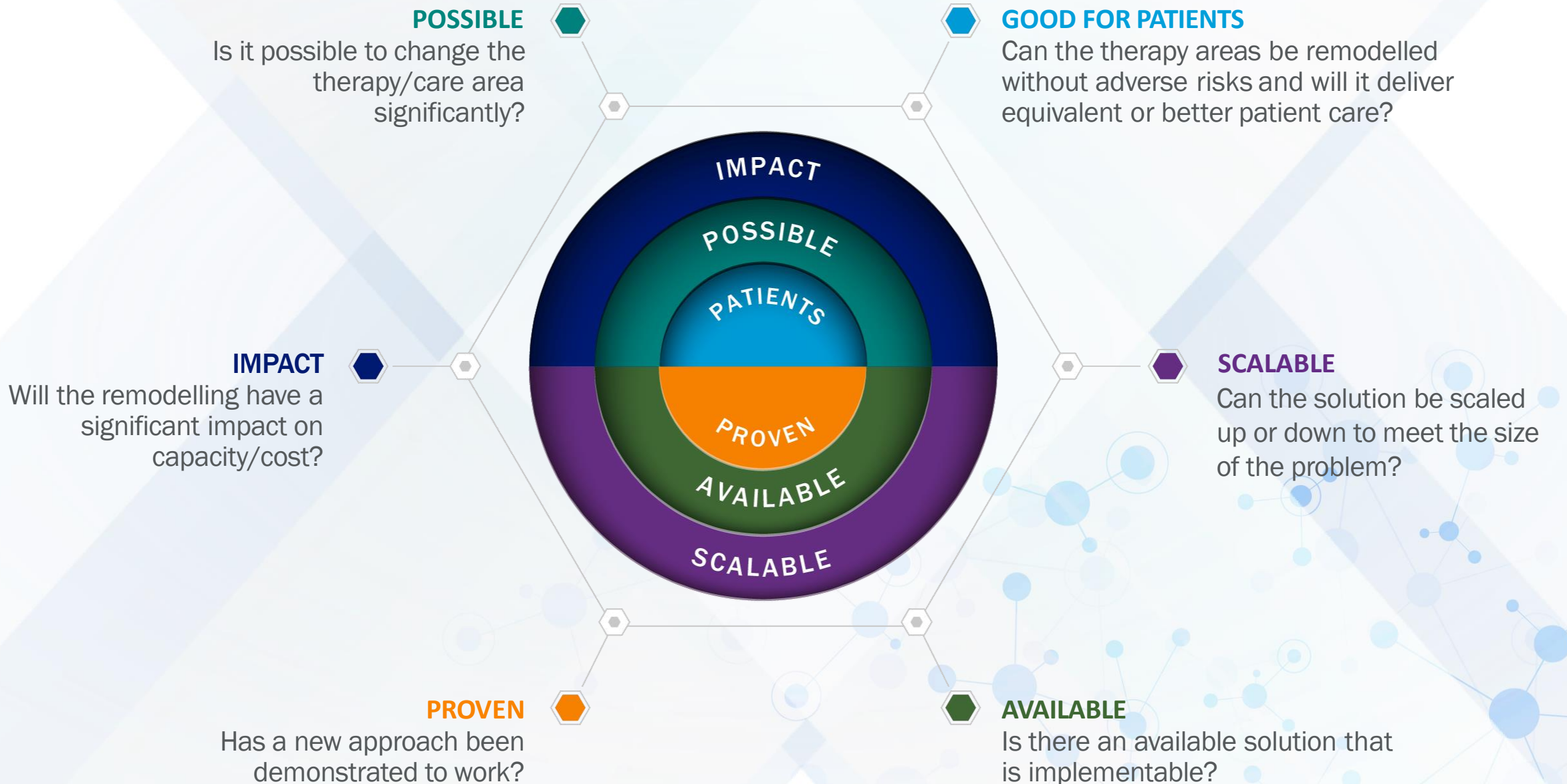


A complex system remodel is needed

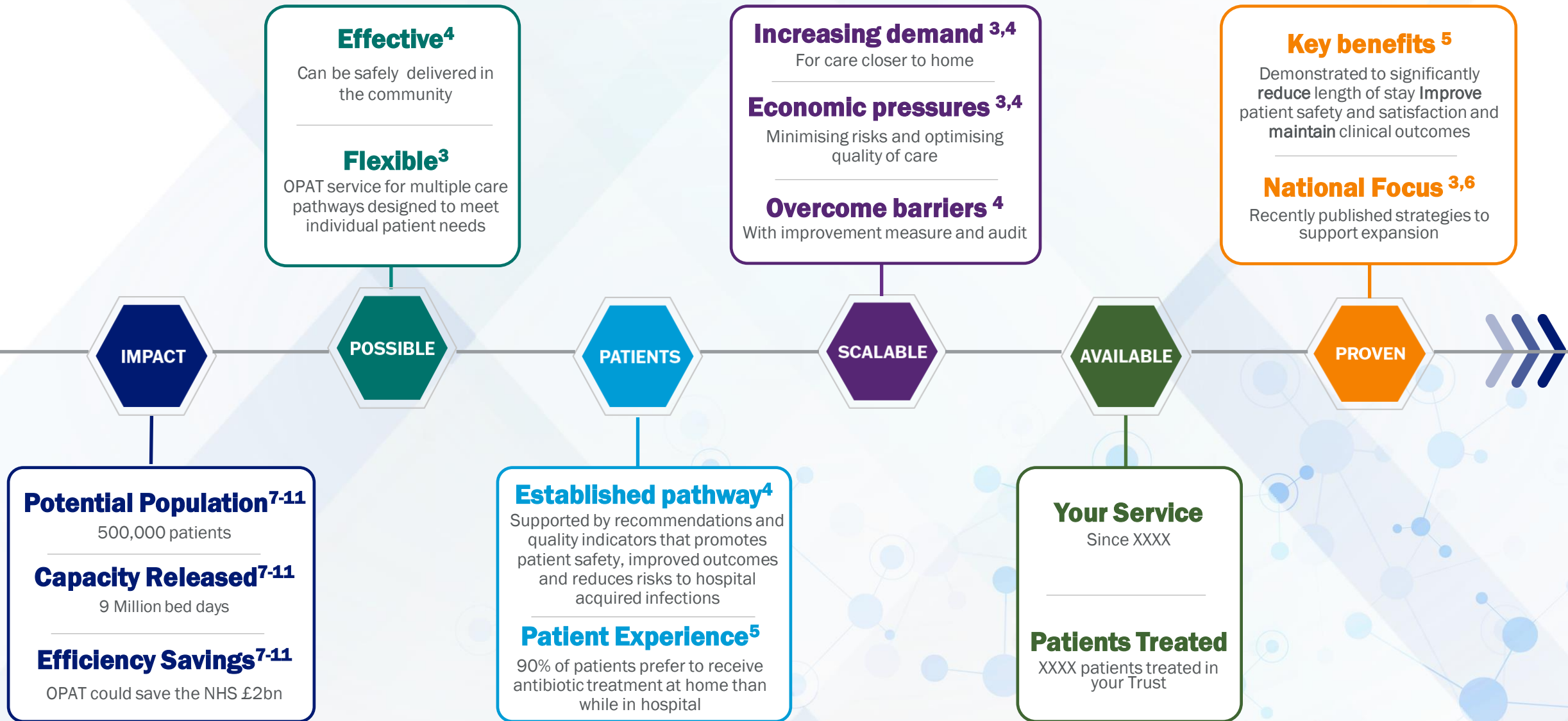


But which therapy areas can you  
build differently – and better?

# With so many services requiring restoration and recovery, how do you prioritise?



# OPAT\*: An opportunity to remodel and rebuild

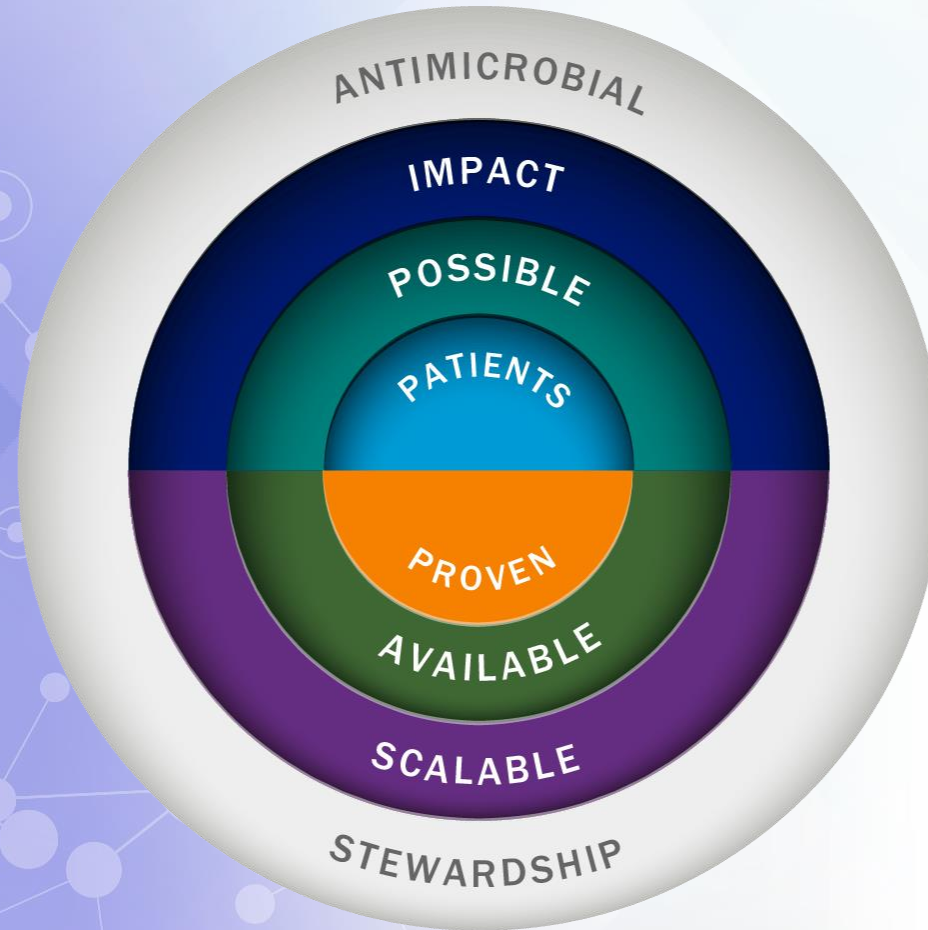


\*Outpatient Parenteral Antimicrobial Therapy (OPAT) is a method for delivering intravenous antimicrobials in the community or outpatient setting, as an alternative to inpatient care

# OPAT: Supporting antimicrobial stewardship

## Silent Pandemic<sup>12</sup>

Making a positive contribution to preserving and protecting antimicrobial effectiveness



## National Focus<sup>13</sup>

OPAT is 1 of 5 key antimicrobial decisions in the 'Start Smart - Then Focus' antimicrobial stewardship programme

## Optimising antibiotic use

Through minimising unnecessary use and involving patients in decision making



# How does IV antimicrobial therapy impact capacity?

- An estimated **1 in 3** hospitalised patients in the UK will receive antimicrobial therapy on any given day<sup>14</sup>. In 2018 IV antimicrobials accounted for 30% of prescriptions in acute care<sup>14</sup>
- **Up to 4%** of all inpatients are in hospital solely to receive IV antimicrobial therapy<sup>8</sup>. Longer stay and “super stranded” patients (21 days or longer) are at further risk of hospital-related health risks such as muscular deconditioning and infections<sup>15</sup>
- Transforming NHS pharmacy services in England recommends NHS England should incentivise OPAT to care for people closer to home or at home, thereby reducing pressure on hospital beds and improving patients’ experience<sup>6</sup>

**The NHS needs a proven and scalable solution that provides optimal antimicrobial therapy while minimising hospital stays and risk of infection to support restoration and recovery**

# Every Patient who could have OPAT, should have OPAT – the importance of data

Authors: Katie Holgate<sup>1</sup>, Steph Williams<sup>1</sup>, Hannah Bolton<sup>1</sup>, Rachel Nye<sup>1</sup>, Millie Watson<sup>1</sup>, Alli Wood<sup>1</sup>, Ann Cole<sup>2</sup>

1. York and Scarborough Teaching Hospitals NHS Foundation Trust 2. Baxter Healthcare Limited, Compton, UK

## Background

OPAT (Outpatient Parenteral Antimicrobial Therapy) has a clear role to play in optimising anti-microbial stewardship, and is listed as one of the Department of Health five options for antimicrobial prescribing decision options to focus therapy.<sup>1</sup>

York and Scarborough Teaching Hospital NHS Foundation Trust (YST) OPAT service has been operational since January 2019, treating over 438 patients and demonstrating year on year growth.

Growth has been progressive, however an OPAT department vision established in 2021 stretched this to seek that "Every patient who could have OPAT, should have OPAT." (Figure 1) An ambitious target but not impossible with a robust evaluation of the service, and a structured approach to scale.

## Objective

An in-depth assessment to understand the current OPAT service and to identify pathways for further expansion together with potential efficiency and productivity gains.

## Method

Working in partnership with Baxter Healthcare Limited a three-month diagnostic process was undertaken with the YST multi-disciplinary team, using a range of service and quality improvement tools to inform an in-depth assessment.

A clear picture of the OPAT current state was developed through:  
Outcomes analysis • Insights: Pathway Mapping and System Flow • Insights: Patient Experience • Insights: Point of Use

## Results

The assessment of OPAT services provided a clear demonstration of how the service has grown from 8.4 patients per month in 2019, 20.8 in 2020, 27.4 in 2021 (Figure 2), saving over 10,500 bed days in line with the department vision and anti-microbial stewardship team goals. Achieving the initial key performance indicators set for reducing inpatient stays, reduction in the number of super stranded patients and percentage of patients on the self-care pathway, (Figures 3-5).

The local OPAT trustwide database developed in line with recommendation 5.1 of the OPAT Good Practice recommendations<sup>2</sup> enabled service evaluation of multiple metrics that demonstrated clear service expansion opportunities and growth. From January 2019 to April 2020, 44% of total patients were trauma and orthopaedic, and surgical patients totalled 71% patients across all sites. The evaluation enabled expanded capacity to now include provision for patients with Endocarditis, Necrotising Otitis Externa, Diabetic Foot infections, Bronchiectasis and Intra-abdominal infections.

The service has significant peaks and troughs, impacted by a number of factors impacting capacity and flow including resource, points of referral and the ability to identify patients.

The OPAT Good Practice Recommendation (GPR) Assessment Tool<sup>3</sup> was utilized to review overall compliance with the British Society for Antimicrobial Chemotherapy OPAT GPRs and to plan further improvement initiatives.

**Patient Experience: 93% reported OPAT allowed them to get on with everyday activities and normal home routine.**

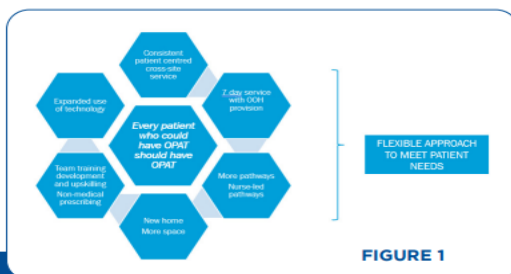


FIGURE 1

Figure 2: OPAT Patient Number – Trustwide



Figure 3: Reduced Inpatient Stays – Trustwide



Figure 4: Super Stranded (on OPAT >1 day) – Trustwide



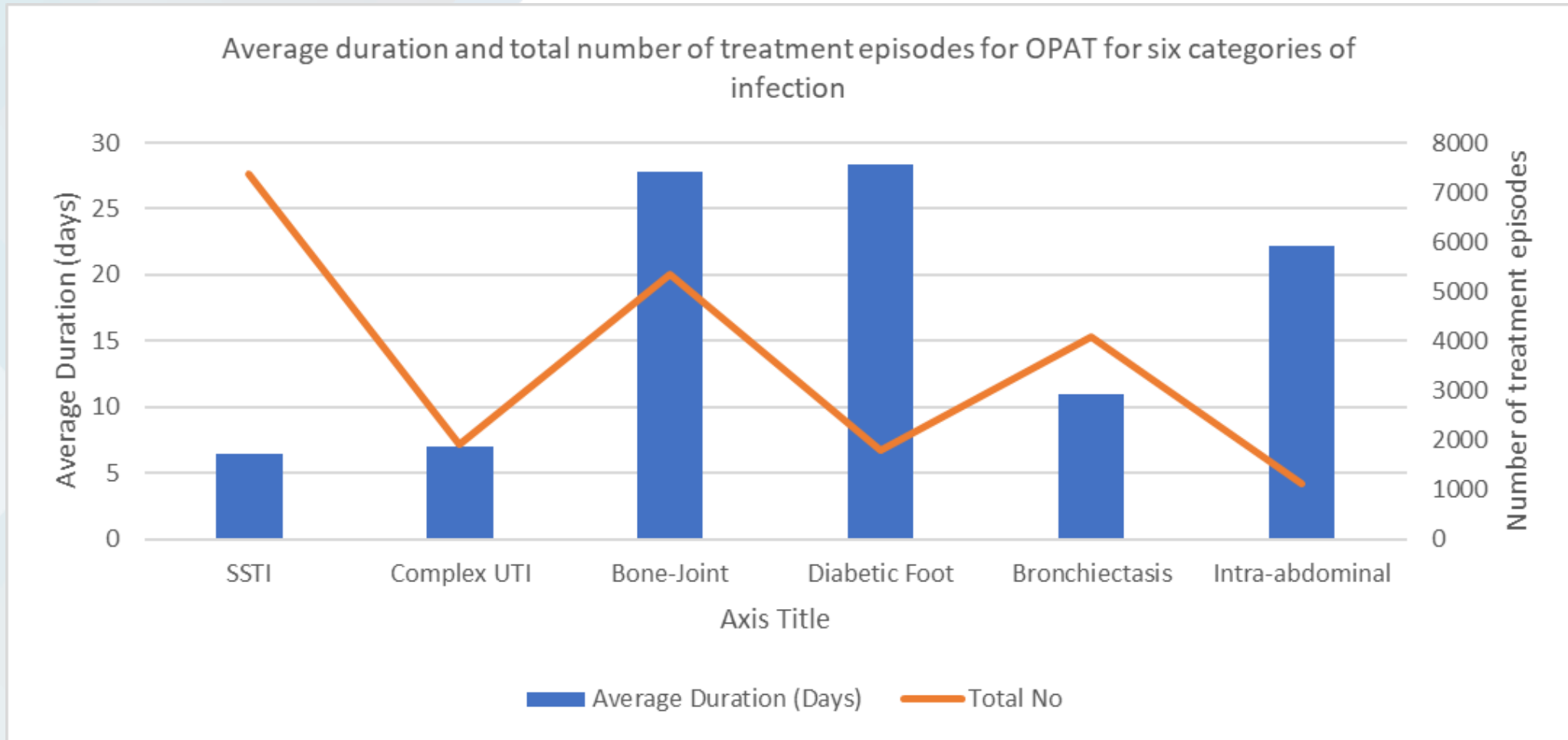
Figure 5: Percentage Patients on self-care pathway – Trustwide



## Conclusion

Moving forward the focus is on predictability for sustainable growth creating a more consistent service, with multiple care pathways optimized to meet individual patient needs across North Yorkshire. The Baxter partnership has offered the Trust an opportunity to understand the service potential and meet their ambitious vision. Ultimately the goal is for 75% of patients in the OPAT service to be on a self-care pathway, thus releasing time to care.

# Findings from BSAC National Outcomes Registry (2015-19)<sup>17</sup>



# In summary

Teams offer the potential to achieve more than any person could achieve working alone; yet, particularly in teams that span professional boundaries, it is critical to capitalize on the variety of knowledge, skills, and abilities available<sup>18</sup>.

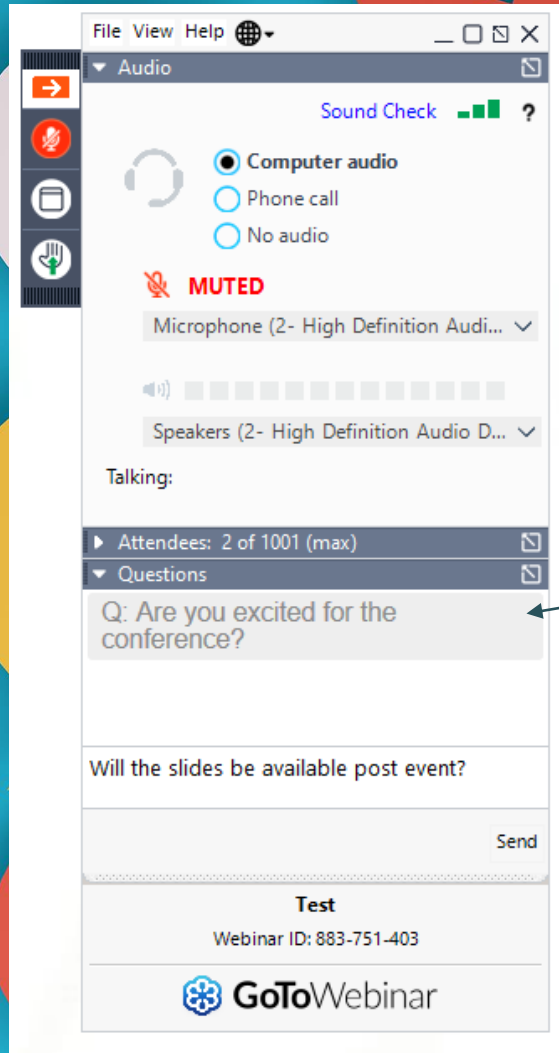
# Thank you for your time





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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/417032/Start\\_Smart\\_Then\\_Focus\\_FINAL.PDF](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/417032/Start_Smart_Then_Focus_FINAL.PDF)
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15. NHS. Getting it right first time (GIRFT). Geriatric Medicine GIRFT Programme National Specialty Report by Dr Adrian Hopper. Available from: [Geriatric Medicine – Getting It Right First Time – GIRFT](https://www.girft.nhs.uk) (accessed November 2022)
16. Every Patient who could have OPAT, should have OPAT – BSAC Spring Meeting May 2022
17. Adapted from table 1 – Dimitrova et al Outpatient parenteral antimicrobial therapy (OPAT) versus inpatient care in the UK: a health economic assessment for six key diagnoses. BMJ Open available from <https://bmjopen.bmj.com/> accessed November 2022
18. <https://www.ncbi.nlm.nih.gov/pubmed/27669139> accessed November 2022



If you have any questions or comments for Speakers across the day, please expand the Questions Section on the GoToWebinar panel. You will not be able to see each others questions.



# NHS Medicines Optimisation Conference 2022



## SPEAKING NOW



Michelle Haddock

Pharmacy Lead  
NHS Arden & GEM CSU

I will be discussing...

“The Discharge Medicines  
Service – Improving patient  
care through cross-sector  
working”



# The Discharge Medicines Service: Improving patient care through cross-sector working

Michelle Haddock  
NHS Arden & GEM CSU

NHS Medicines Optimisation Conference  
30 November 2022

[www.ardengemcsu.nhs.uk](http://www.ardengemcsu.nhs.uk)



# Session overview

- ✓ About NHS Arden & GEM CSU
- ✓ DMS background
- ✓ DMS objectives
- ✓ Patient pathway
- ✓ Implementation approach
- ✓ Black Country pilot
- ✓ Lessons learned
- ✓ Questions



# About NHS Arden & GEM CSU

## OUR CUSTOMERS



# 90+

Working with a customer base of  
90+ organisations across  
health and care systems

- NHSE
- ICSs
- ICBs
- Trusts
- Primary Care
- Local Authorities

## OUR BUSINESS



**£95m**  
Turnover 2021/22

**£34m**  
Generated in new  
business 2021/22

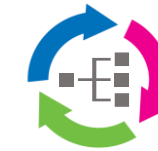


## OUR PEOPLE

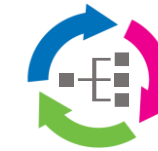


**1,000+**  
Multidisciplinary staff

## OUR CLINICAL SERVICES



OUR CLINICAL SERVICES



Referral  
management



Individual  
Funding  
Requests

Personal Health  
Budgets



Quality and clinical  
governance



Medicines optimisation

- Medication reviews
- Medicines support service
- Drugs spend analysis
- Biosimilar prescribing
- Primary and secondary experience
- Medicines management in care homes

## OUR ACCREDITATIONS

**INVESTORS IN PEOPLE™**  
We invest in people Gold

**INVESTORS IN PEOPLE®**  
We invest in wellbeing Gold



# DMS background



- Discharge from hospital associated with an increased risk of avoidable medication related harm<sup>1</sup>
- NICE guideline NG05<sup>2</sup> recommendations:
  - medicines-related communication systems should be in place when patients move care settings
  - medicines reconciliation processes should be in place for all persons discharged from a hospital or another care setting back into primary care, and the act of reconciling the medicines should happen within a week of discharge
- 2016 first data published ‘Newcastle Study’<sup>3</sup> showed that this type of clinical handover to community pharmacy could result in [lower rates of readmission at 30, 60 and 90 days](#)
  - Patients receiving CP follow-up consultation had statistically significant lower rates of readmissions and shorter hospital stays than those patients without
- TCaM; pre-pandemic system-wide collaboration between AHSN, Trusts and Community Pharmacy
- CQUIN target for acute hospital Trust inpatients 2022/23:
  - Refer 0.5 - 1.5% of all inpatient discharges with a change in their medicines (excluding day case patients and maternity discharges)
  - Referral within 48 hours post discharge<sup>4</sup>
- Established as Essential service 15th Feb 2021, Community Pharmacy Contractual Framework<sup>5</sup>



# DMS objectives



To ensure better communication of changes to a patient's medication when they leave hospital and to reduce incidences of avoidable harm caused by medicines



Optimise the use of medicines whilst facilitating shared decision making



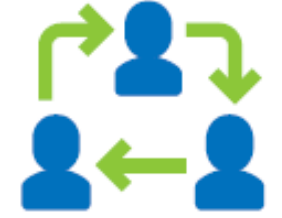
Reduce harm from medicines at transfer of care



Improve patients' understanding of their medicines and how to take them following their discharge from hospital



Reduce hospital re-admissions



Support collaborative working between hospital and community pharmacy teams and primary care networks, including GP practices



# DMS patient pathway



## Hospital

- Identify and refer patient who will benefit from follow up by community pharmacy
- Work in partnership with community pharmacy to support self discharge for patients



## Community Pharmacy

- Medicines reconciliation and clinical check
- Resolve issues
- Consultation with patient



## General Medical Practice (in a Primary Care Network)

- Work in partnership with community pharmacy to provide safe clinical care for patients
- Update central records
- Follow-up medical care and /or tests or monitoring
- Structured medication reviews
- Prescribing



# Implementation approach – initial phase



## Gain leadership endorsement

Place and cross-sector representatives



## Stakeholder engagement

Identify key stakeholders and their roles



## Initial scoping

- Baseline assessments to establish DMS activity; build upon TCaM
- Trust implementation tool
- Understand systems and processes
- Identify barriers
- Determine support requirements

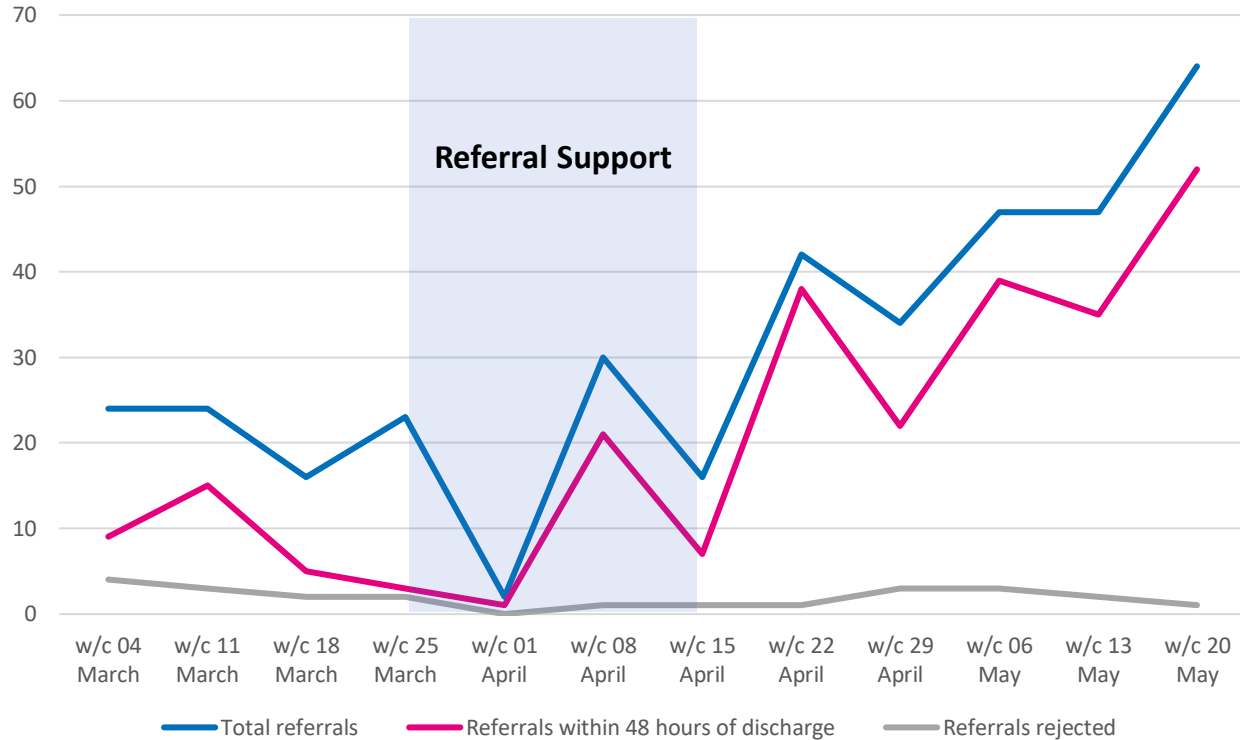


# Implementation approach – tailored support

- Data retrieval and sharing
- Identifying process efficiencies, overcoming barriers
- Updating SOPs
- Development of training materials
- Delivery of training: remote and in-person team sessions, 1-2-1 bedside training
- System engagement – cross-sector webinars
- Individual team, place and system feedback
- Networking



# Black Country pilot



**Graph 1: Dudley Group NHS Foundation Trust – Weekly DMS Referrals, March - May 2022**

## Feedback from a DMS training attendee at an NHS trust:

*“The training has been well received... I believe it has given those unfamiliar the confidence to go ahead and has also been a valuable reminder to those who had forgotten a lot of what we did before. The one-to-one training has also helped those less tech savvy and less tech confident.”*

**Senior Pharmacy Technician**

# Lessons learned

## Cross sector appetite

for improving patient experience and minimising medicines related avoidable harm at the interface

## Variations in processes

and mobilising effective support based on individual need

## IT infrastructure

and lack of interoperability

## Business intelligence and performance monitoring

- Trusts needed to identify target proportion of discharges referred to DMS, in relation to their total number of in-patient discharges
- Visibility over referrals completed, rejected or unactioned by Community Pharmacy

## Training requirements

## Communications and engagement

- Raise the profile of DMS – remind teams involved of the value the service brings
- Encourage teams to consider this element of patient care as a priority
- Recognise demands on existing workforce capacity



# Any questions?



Get in touch with us at:

 [www.ardengemcsu.nhs.uk](http://www.ardengemcsu.nhs.uk)

 @ardengem

 [contact.ardengem@nhs.net](mailto:contact.ardengem@nhs.net)

# References



## 1. Technical report WHO Medication safety in transitions of care

<https://apps.who.int/iris/bitstream/handle/10665/325453/WHO-UHC-SDS-2019.9-eng.pdf>

## 2. Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes.

Available at <https://www.nice.org.uk/guidance/ng5>

## 3. New transfer of care initiative of electronic referral from hospital to community pharmacy in England: a formative service evaluation. Nazar H et al.

Available at [New transfer of care initiative of electronic referral from hospital to community pharmacy in England: a formative service evaluation | BMJ Open](#)

## 4. Commissioning for Quality and Innovation (CQUIN): 2022/23; 17 March 2022;

Available at [NHS England » Commissioning for Quality and Innovation \(CQUIN\): 2022/23](#)

## 5. Community Pharmacy Contractual Framework: 2019 to 2024; 03 February 2022;

Available at [Community Pharmacy Contractual Framework: 2019 to 2024 - GOV.UK \(www.gov.uk\)](#)





# NHS Medicines Optimisation Conference 2022



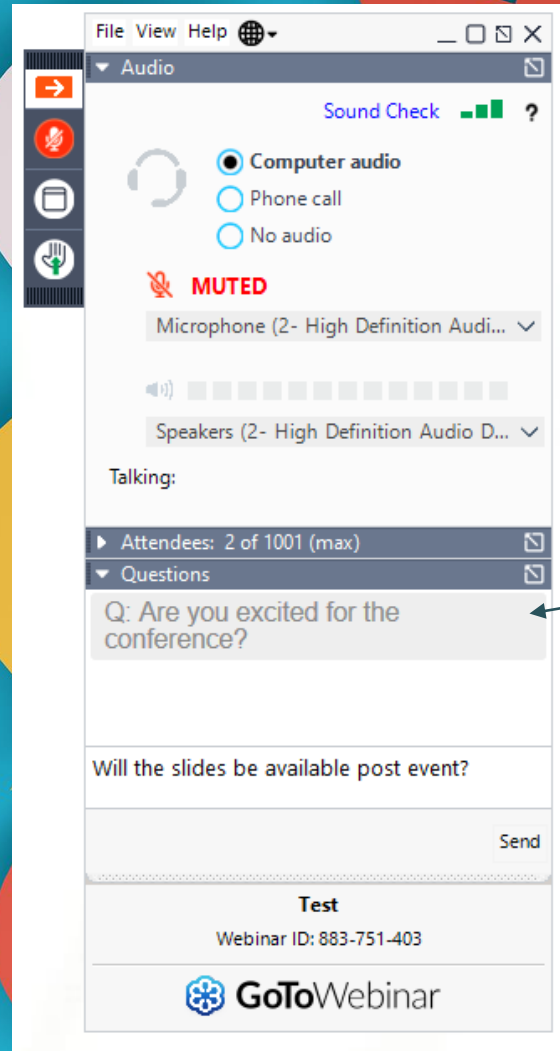
## UP NEXT...

# AstraZeneca



**This is a promotional symposium  
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# NHS Medicines Optimisation Conference 2022



# COMFORT BREAK

**Please remain logged into the  
platform. We will resume at  
12:40pm**



# NHS Medicines Optimisation Conference 2022



## SPEAKING NOW



Chris McAuley  
Programme Delivery  
Manager - NHS  
Benchmarking Network



Mr Stan Fleming  
Graduate Project  
Coordinator - NHS  
Benchmarking Network

### We will discuss...

“Findings from 2022  
Pharmacy and Medicines  
Optimisation Benchmarking  
Project”



# **NHSBN Pharmacy 2022 Benchmarking Findings Webinar**

**Chris McAuley – Programme Delivery Manager**  
**Stan Fleming – Graduate Project Coordinator**

# Welcome and introduction



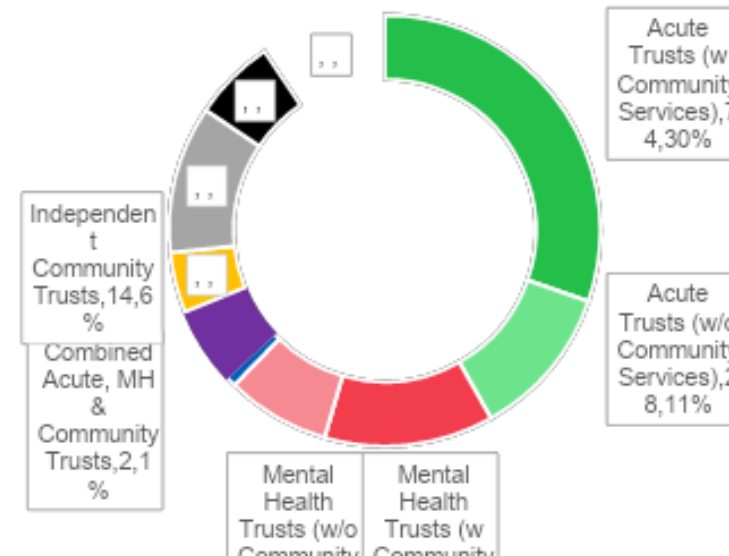
# Network membership

240+ member organisations and c.10,000 clinicians and managers using the service

In England:

- 75% of acute providers
- 87% of NHS Trusts providing community services, plus 11 Social Enterprises
- 100% of mental health trusts
- 31% of ICBs by population covered
- 100% coverage in Wales Health Boards
- 100% coverage in Northern Ireland HSCTs
- 100% coverage of Scottish Health Boards, plus the Scottish Government

Membership profile



# 2022/23 work programme

## Core Network projects



### Acute Sector

- Acute Transformation Dashboard
- Acute Therapies
- Emergency Care
- Managing Frailty in Acute Settings
- Operating Theatres
- Outpatients
- Pharmacy & Medicines Optimisation (Provider)

### Community Sector

- Community Indicators (monthly)
- Community Services
- Community Hospital Bed Survey
- Intermediate Care



### Mental Health Sector

- Adults & Older Adults Mental Health
- Children & Young People's Mental Health Services (CYP MH)
- Learning Disabilities
- Mental Health & Learning Disabilities Covid-19 Dashboard (monthly)



### Whole System

- Cost Collection Analysis
- Integrated Care System Benchmark
- ICS Pilots and Whole System Events
- Summary Opportunity Reports
- Whole Systems Beds

To view the 2022/23 work programme calendar,

[click here.](#)

**NHS**

Benchmarking Network







# Project timetable

Period	Project Stage
January to March	Project consultation and development
April to June	Data collection
9 <sup>th</sup> June	Pharmacy Share Learning Webinar
July to September	Data validation and analysis
August	Draft online analysis toolkit
September	Draft reports released
6 <sup>th</sup> October	Findings Webinar
October	Outputs released

2022 is the eighth iteration of the Pharmacy & Medicines Optimisation project.

Within each Benchmarking project, we produce a range of network resources:

-  **Online project toolkits**
-  **ICS Benchmarker**
-  **Summary Report**
-  **Knowledge Exchange Forum**
-  **Shared learning & good practice**
-  **Webinar presentations and recordings**



# Benchmarking findings

**Stan Fleming and Chris McAuley**  
**NHS Benchmarking Network**

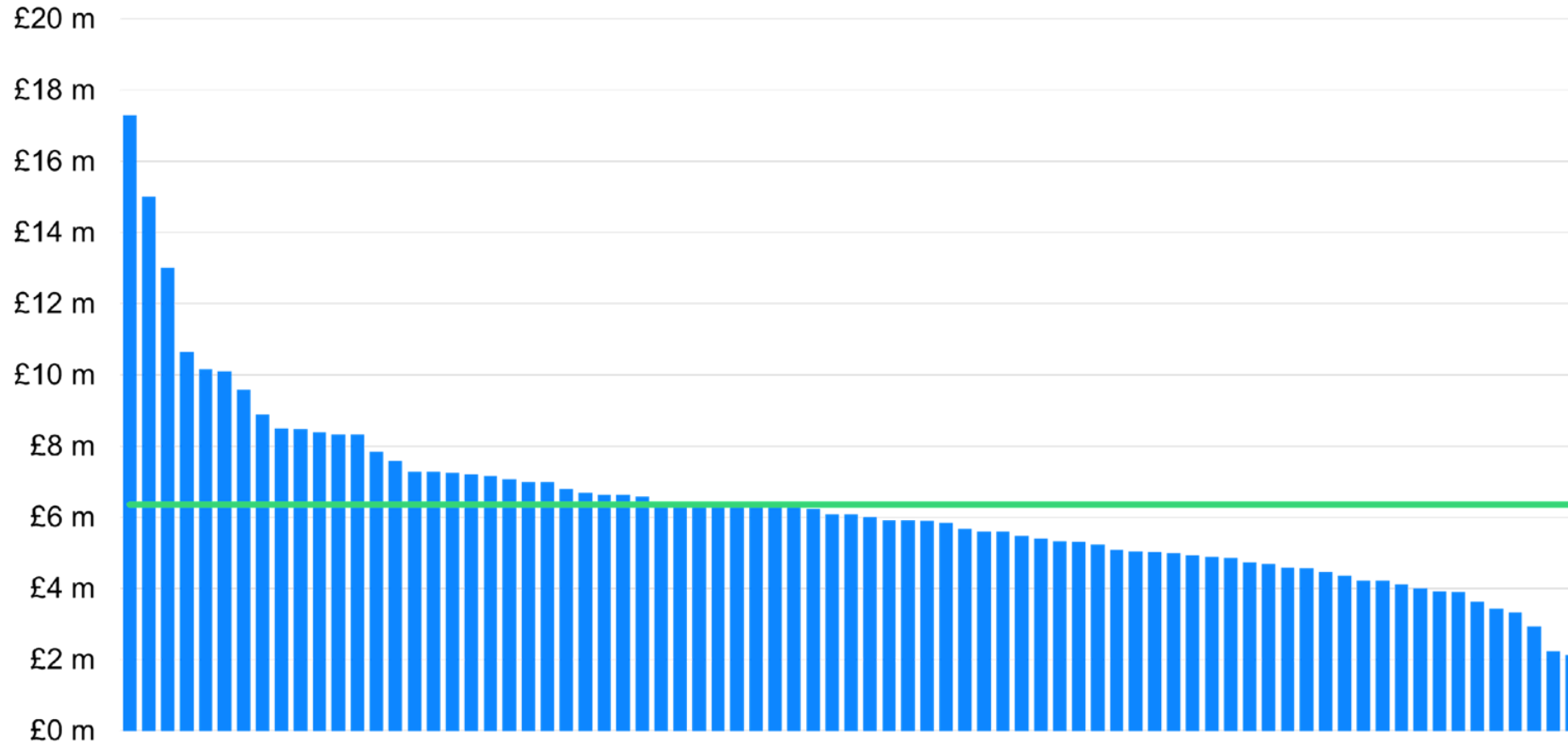


# Pharmacy Overview



# Medicines spend and budget

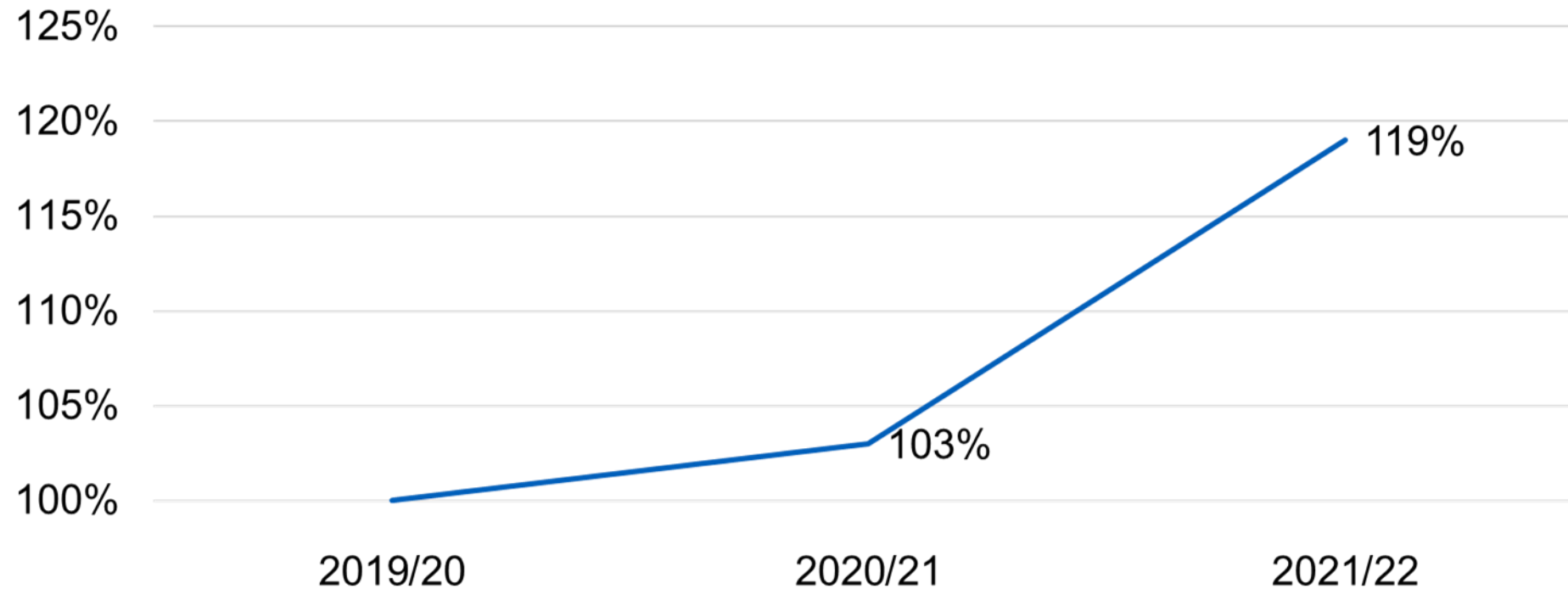
## Total medicines cost per 100 beds



Year	Mean
2022	£6.4 m
2021	£6.2 m
2020	£5.5 m
2019	£5.0 m

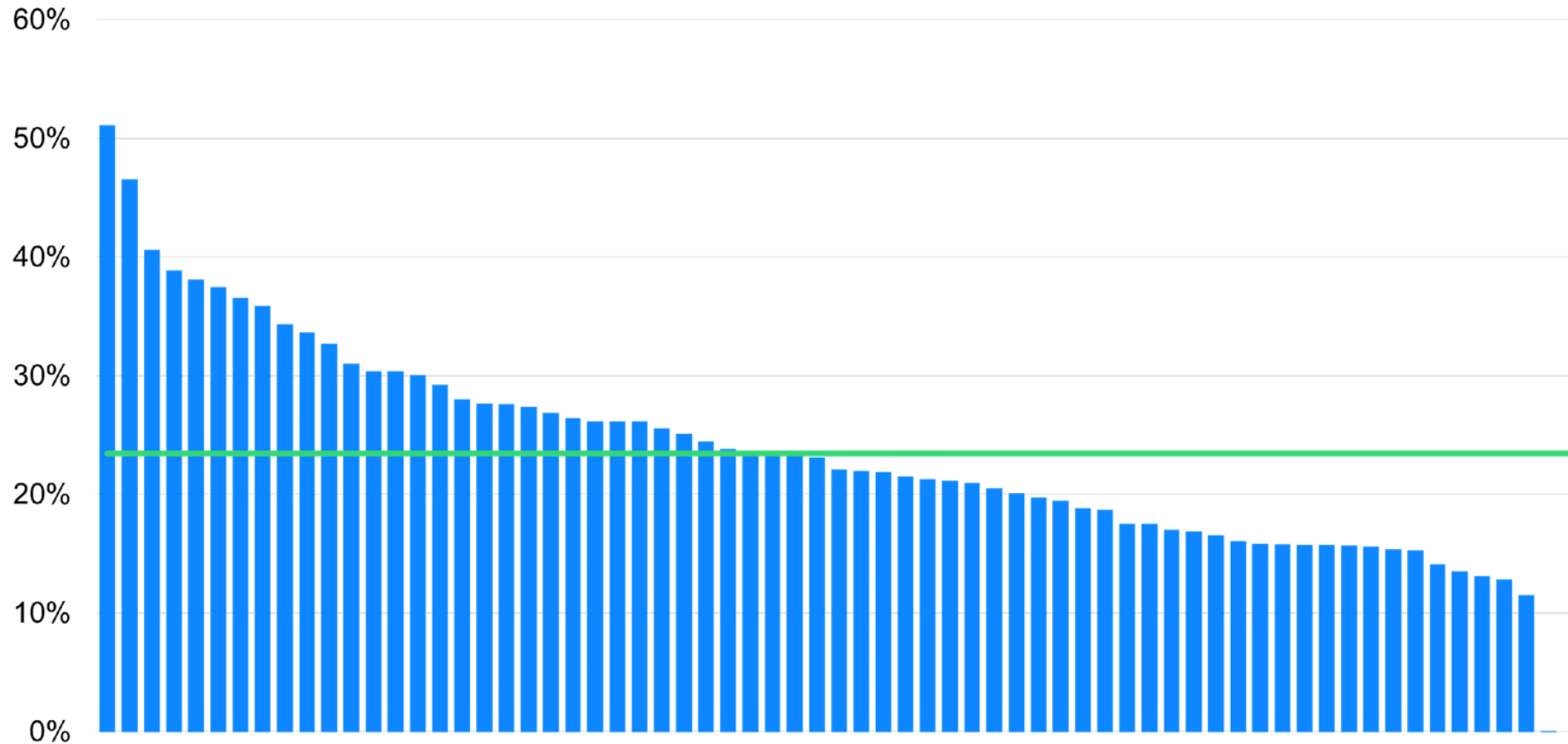
# Medicines spend and budget

## Medicines costs timeseries (% of 2019/20 value)



# Medicines spend and budget

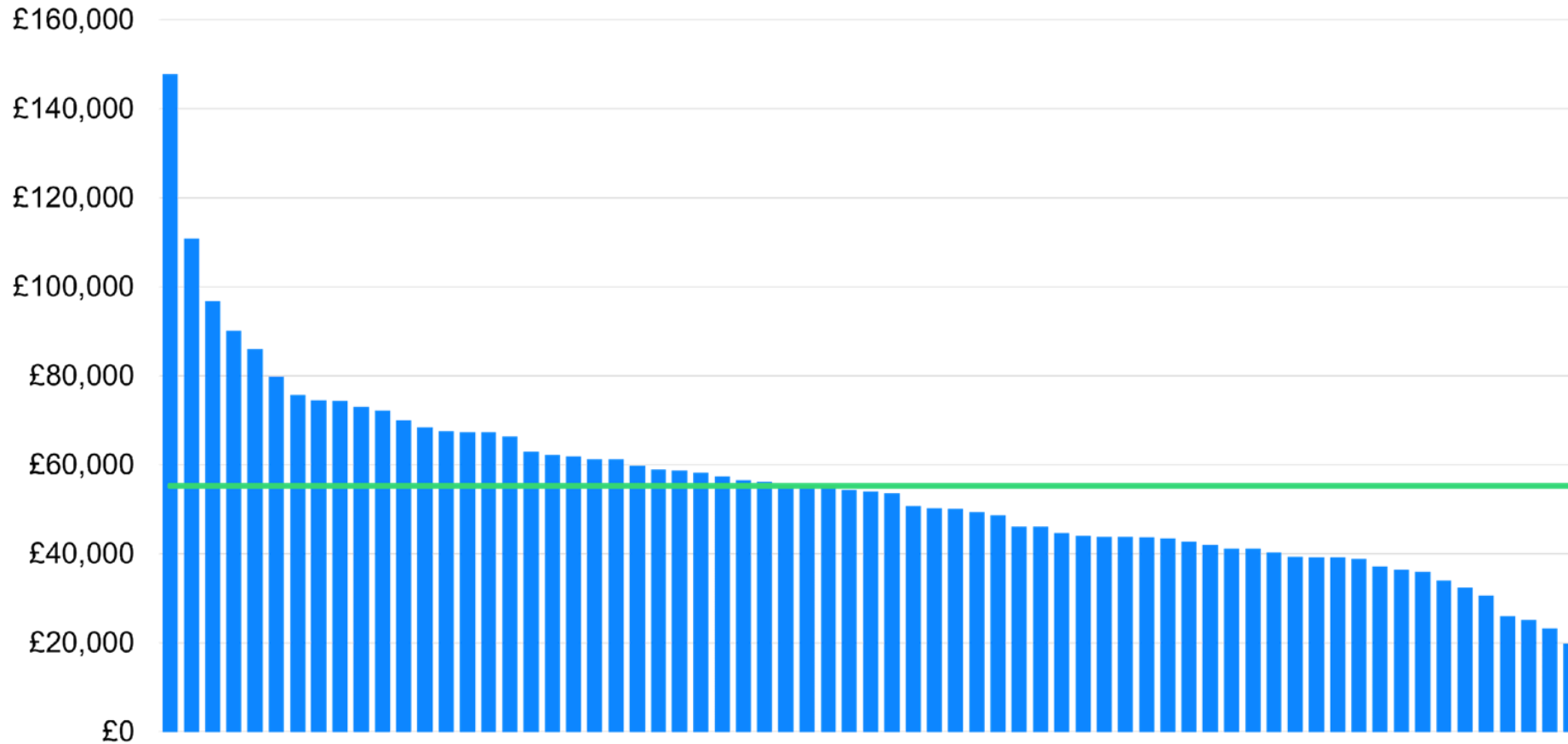
## % of total medicines cost spent on homecare medicines



Year	Mean
2022	23%
2021	26%
2020	21%
2019	25%

# Medicines spend and budget

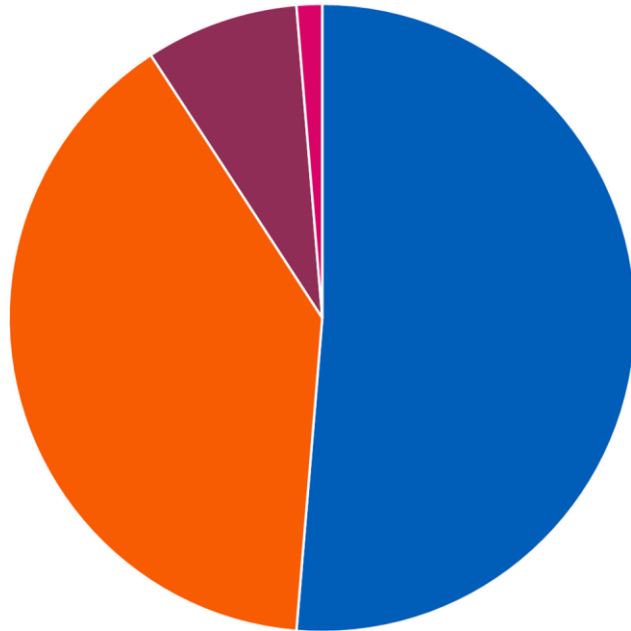
## Cost of medical gases per 100 beds



Year	Mean
2022	£55 k
2021	£55 k
2020	£47 k
2019	£34 k

# Service overview

Do medical gas pipeline systems meet the HTM 02-01 technical standards?



Yes	51%
Mostly	40%
Partially	8%
No	1%

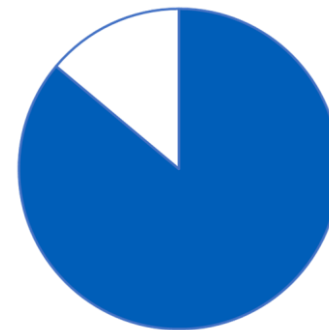
Does the organisation have a Medical Gas Committee?



% Yes 98%

95% in 2021

If yes, does the Chief Pharmacist or a Deputy Chief Pharmacist sit on the committee?



% Yes 86%

91% in 2021

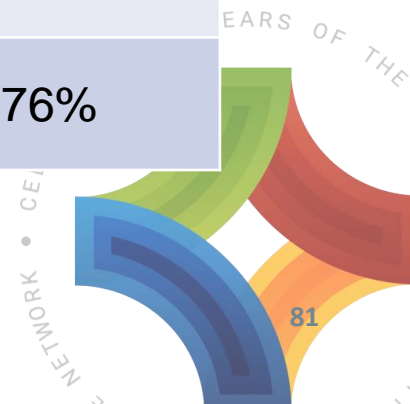


# Service overview

## System level working



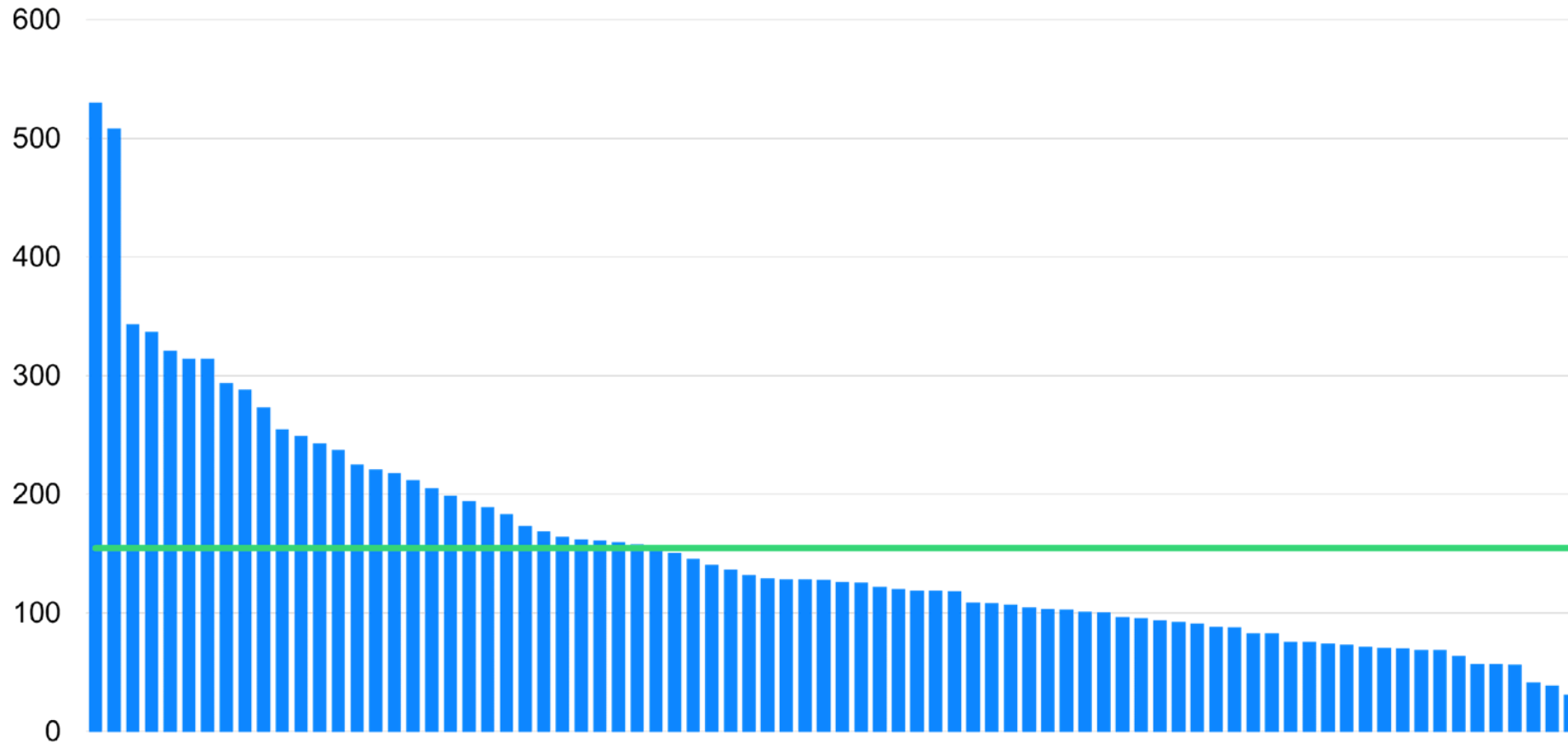
	All participants % yes (2022)
Is there an interface pharmacist who works between the provider organisation and the ICS?	29%
Are there designated posts within the ICS to deliver education and training for pharmacy staff?	15%
Does the organisation have an ICS or place-based workforce strategy?	40%
Have any pharmacists left the organisation to join PCNs?	83%
Have any pharmacy technicians left the organisation to join PCNs?	76%





# Resourcing

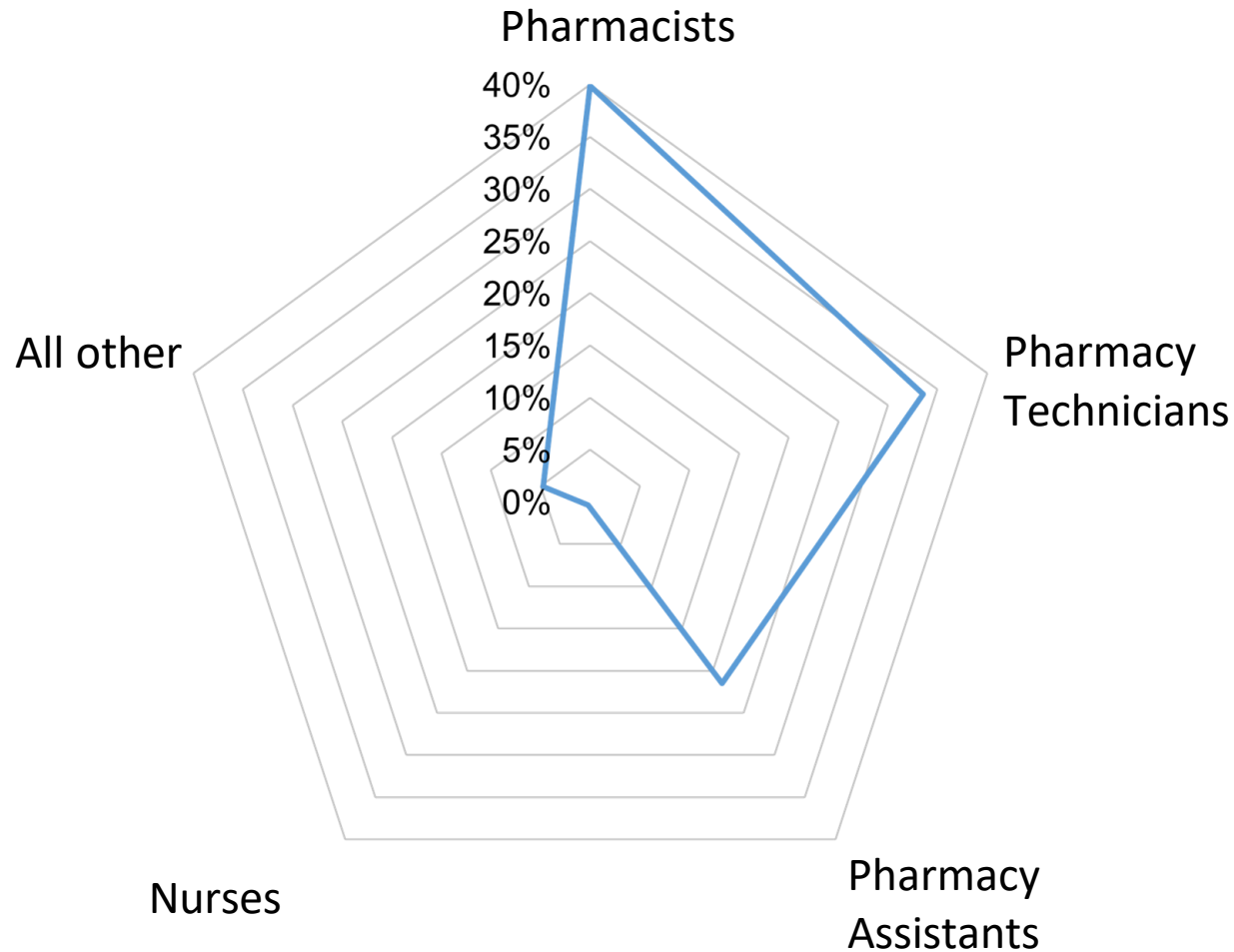
## Total WTE pharmacy staff employed (unbenchmarked)



Year	Mean
2022	155
2021	123
2020	106
2019	110
2018	88
2017	87

# Resourcing

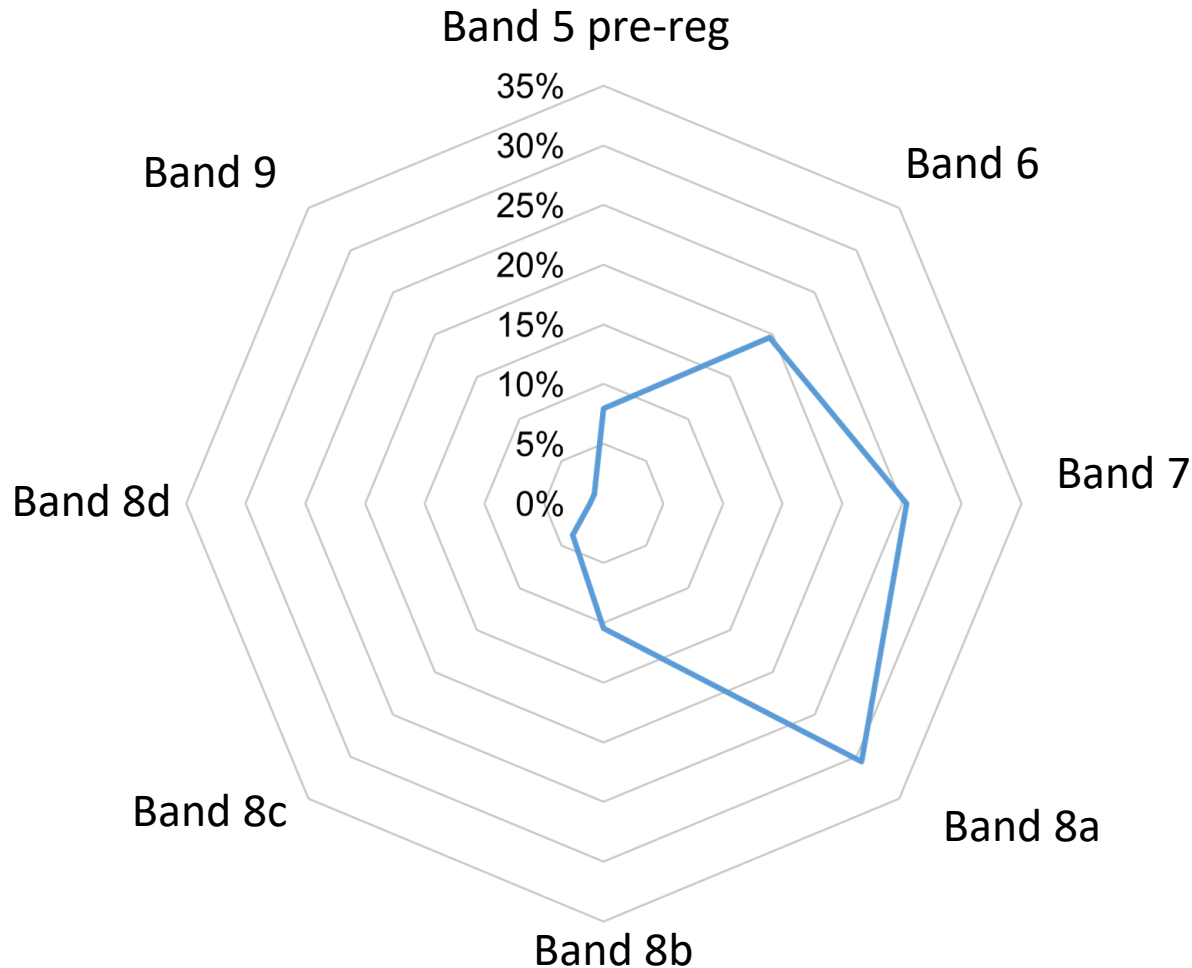
## Pharmacy department discipline mix



	2022	2021	2020
Pharmacists	40%	39%	40%
Pharmacy Technicians	34%	34%	34%
Pharmacy Assistants	22%	21%	21%
Nurses	0%	0%	0%
All other	5%	5%	5%

# Resourcing

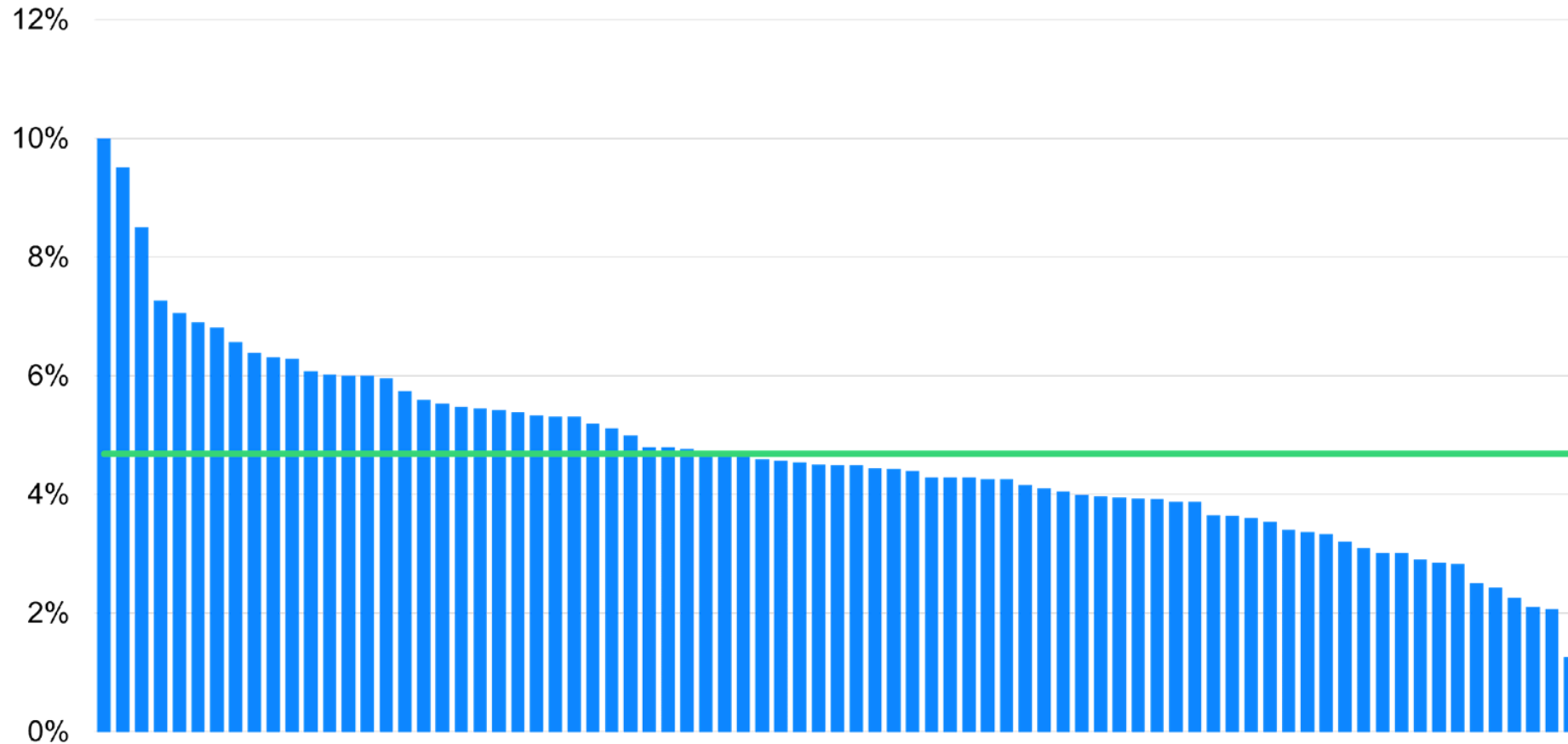
## Pharmacist skill mix



	2022	2021	2020
Band 5 pre-reg	8%	9%	9%
Band 6	20%	21%	22%
Band 7	25%	26%	26%
Band 8a	31%	29%	28%
Band 8b	10%	9%	9%
Band 8c	4%	3%	3%
Band 8d	1%	1%	1%
Band 9	1%	1%	1%

# Resourcing

## % sickness/absence rate



Year	Mean
2022	5%
2021	4%
2020	4%
2019	3%

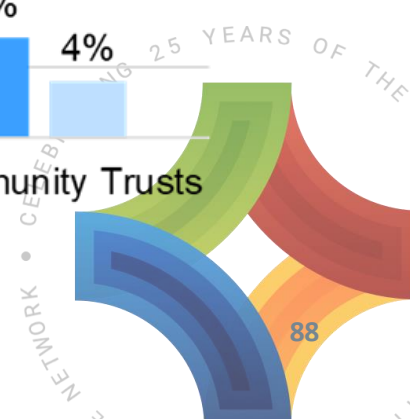
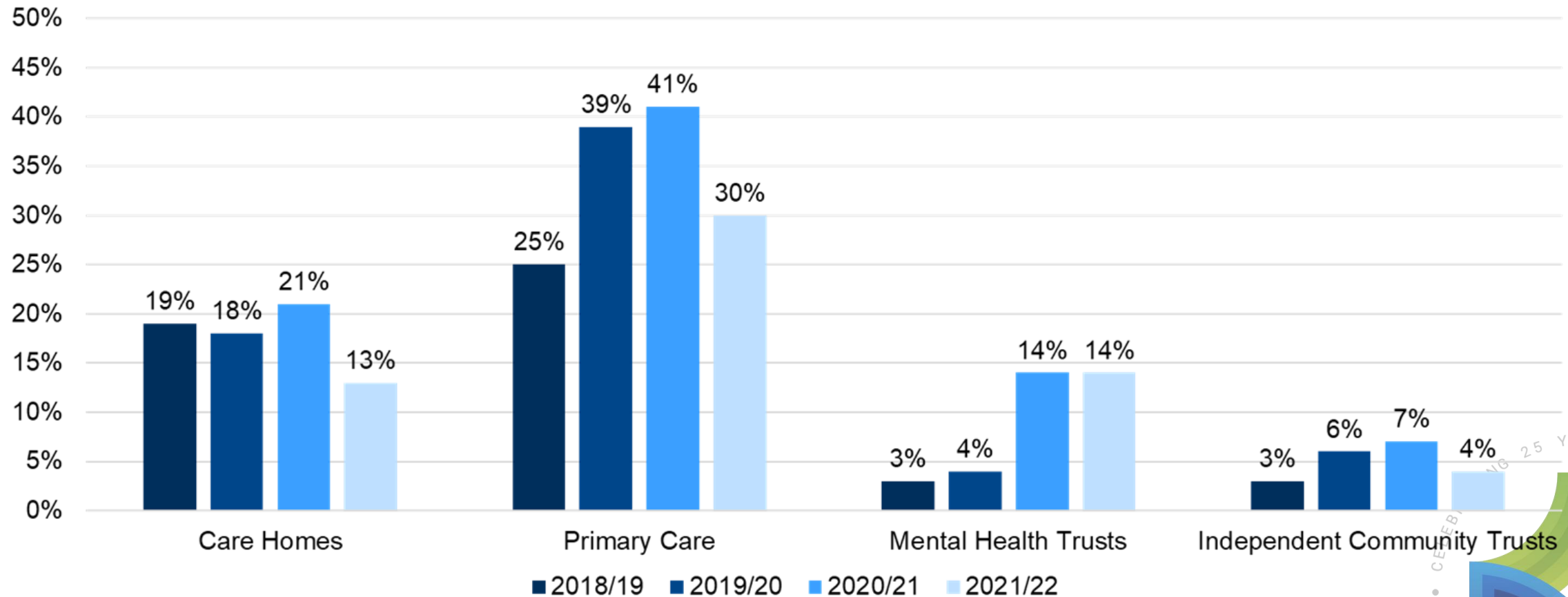






# Resourcing

## Participants that have staff with integrated roles in care settings



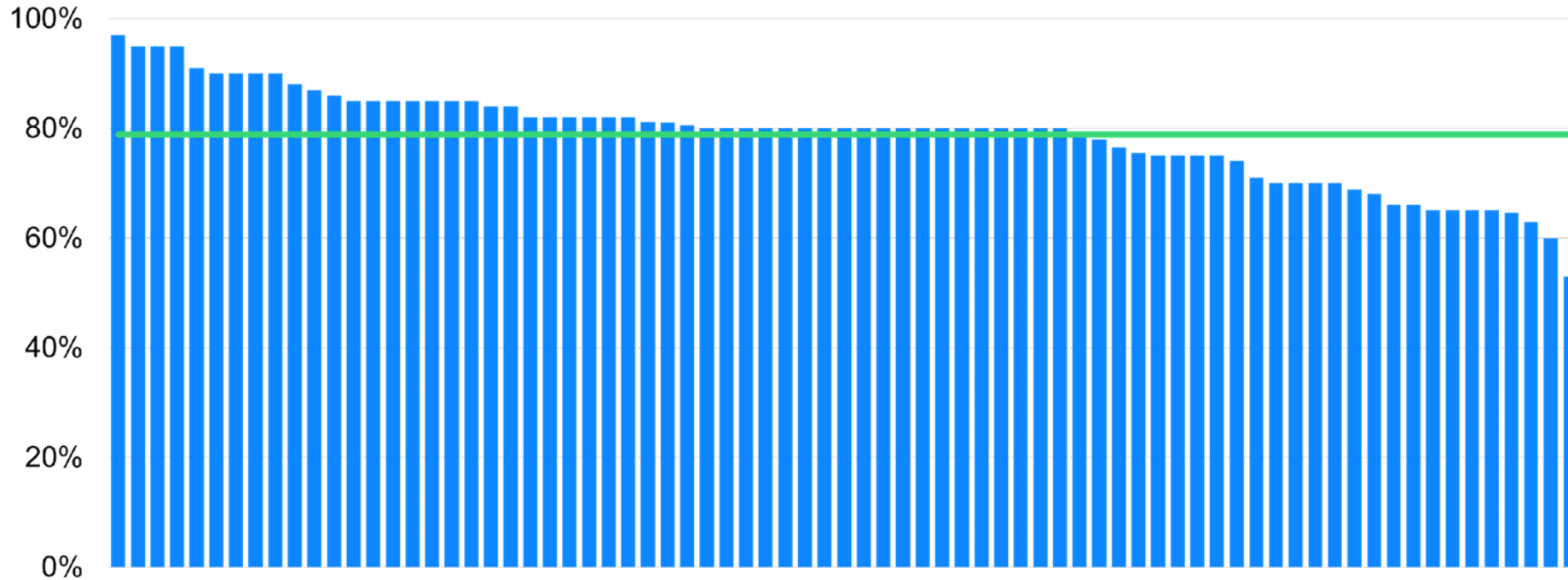
# Availability

## Availability overview

	In-house	By SLA (NHS body)	Collaborative /shared service	Commercial company	Mixture	Not provided
Dispensing services – Inpatients	99%	0%	0%	0%	1%	0%
Dispensing services – Outpatients	68%	0%	2%	0%	28%	2%
Dispensing services – discharge	95%	0%	0%	0%	5%	0%
Drug distribution	96%	0%	0%	0%	2%	1%
Medicines procurement	95%	0%	1%	0%	4%	0%
Clinical pharmacy	99%	1%	0%	0%	0%	0%
Formulary/interface	69%	0%	29%	0%	3%	0%
Medicines information	78%	7%	3%	0%	5%	7%
Aseptic services	60%	0%	1%	0%	35%	4%
Manufacturing	16%	0%	0%	0%	24%	60%
Pre-packing	20%	2%	2%	0%	34%	43%
Quality Control/Quality Assurance	46%	26%	1%	0%	10%	17%
Homecare	74%	4%	2%	0%	19%	2%
Education & training	71%	1%	1%	0%	27%	0%
Clinical trials	95%	0%	1%	0%	2%	1%
Outreach in GP practices	10%	3%	1%	0%	3%	84%

# Clinical pharmacy

## % of pharmacists' time spent undertaking clinical activities

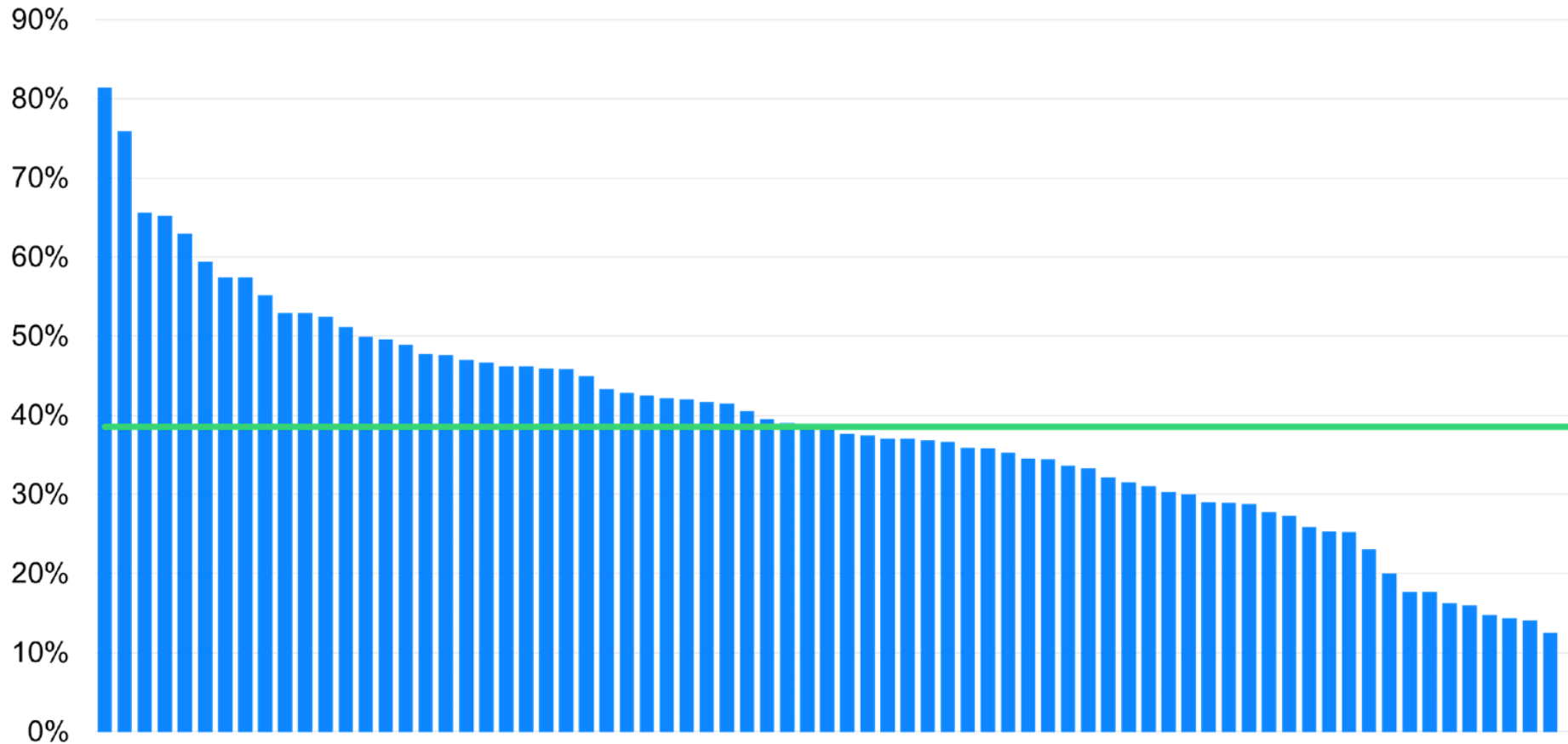


Year	Mean
2022	79%
2021	78%
2020	76%
2019	75%
2018	75%
2017	69%
2016	66%



# Clinical pharmacy

## % of all pharmacists that are qualified to prescribe



Year	Mean
2022	39%
2021	34%
2020	32%
2019	31%
2018	29%
2017	26%
2016	24%
2014	21%

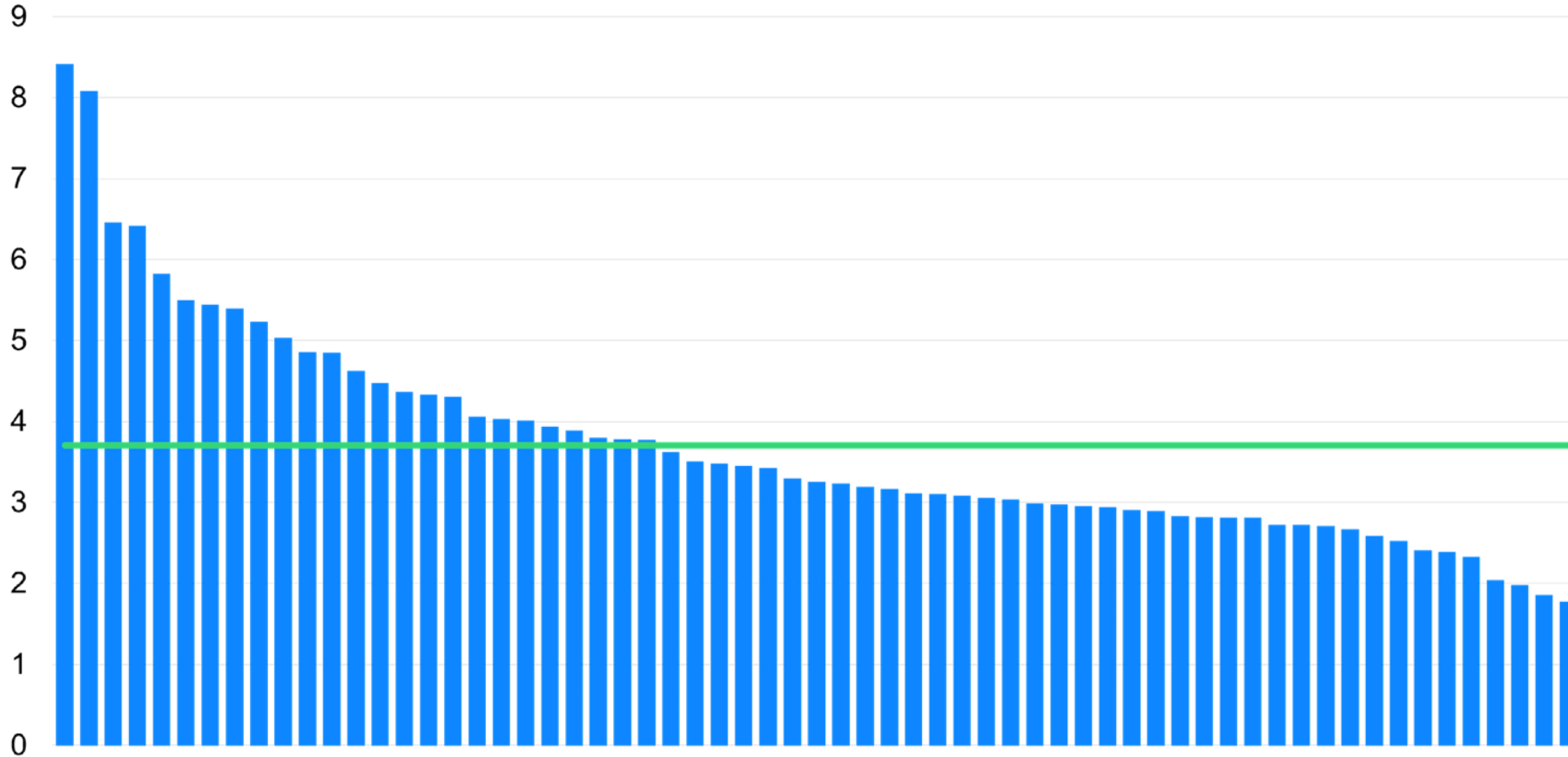






# Stock / Procurement

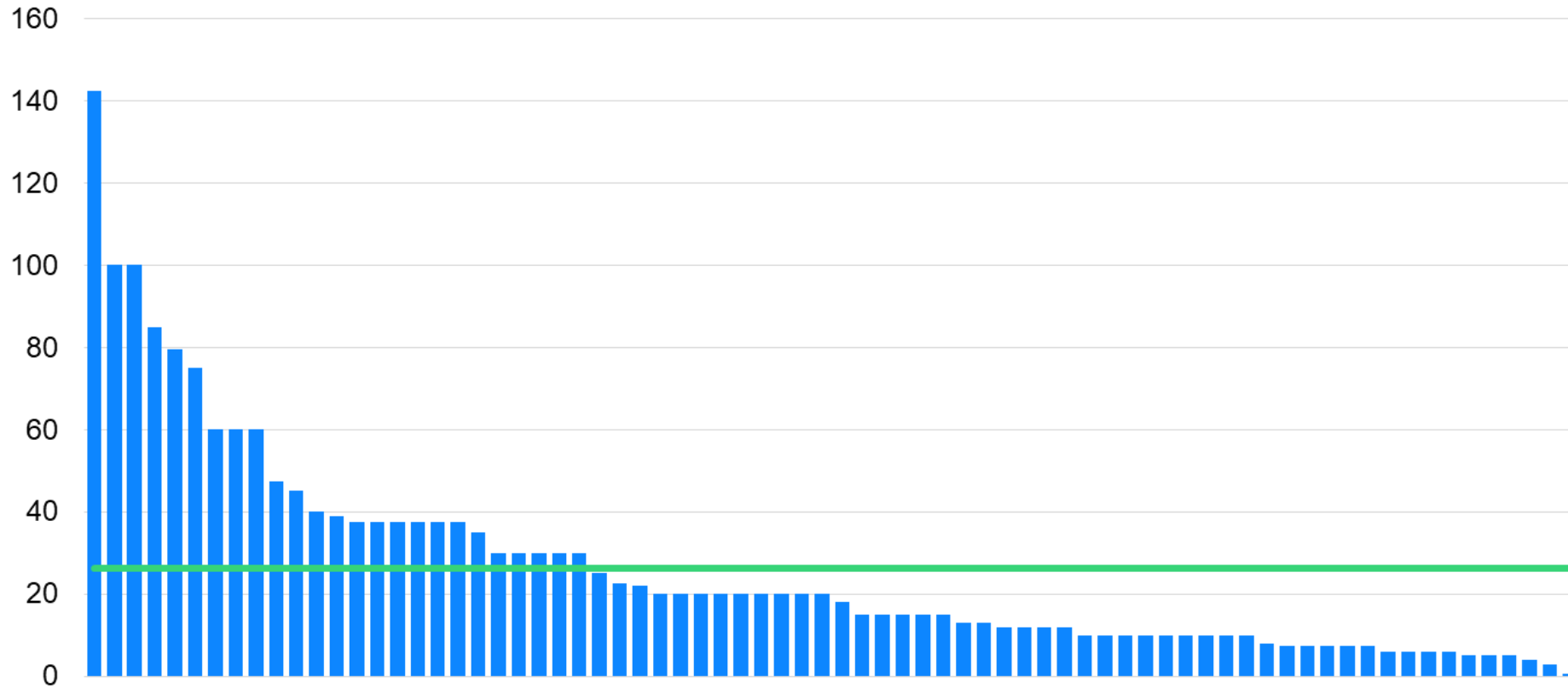
## Total number of order lines sent per order (inc. homecare)



Year	Mean
2022	3.7
2021	3.7
2020	3.7

# Stock / Procurement

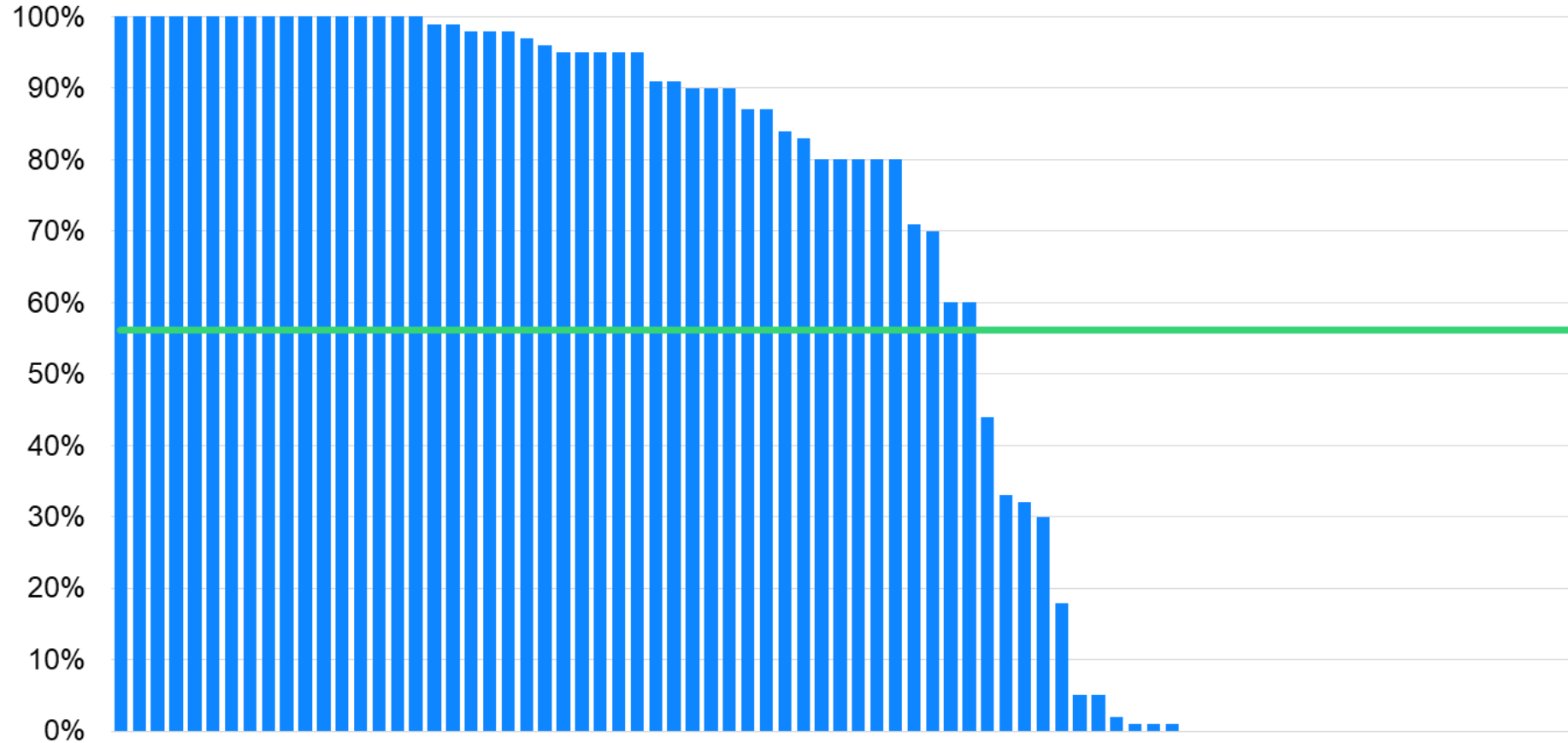
## Estimated number of hours per week spent managing medicines shortages (unbenchmarked)



Year	Mean
2022	26.2
2021	22.7
2020	19.7

# Digital

## % of inpatient beds prescribed digitally



Year	Mean
2022	56%
2020	45%
2019	44%

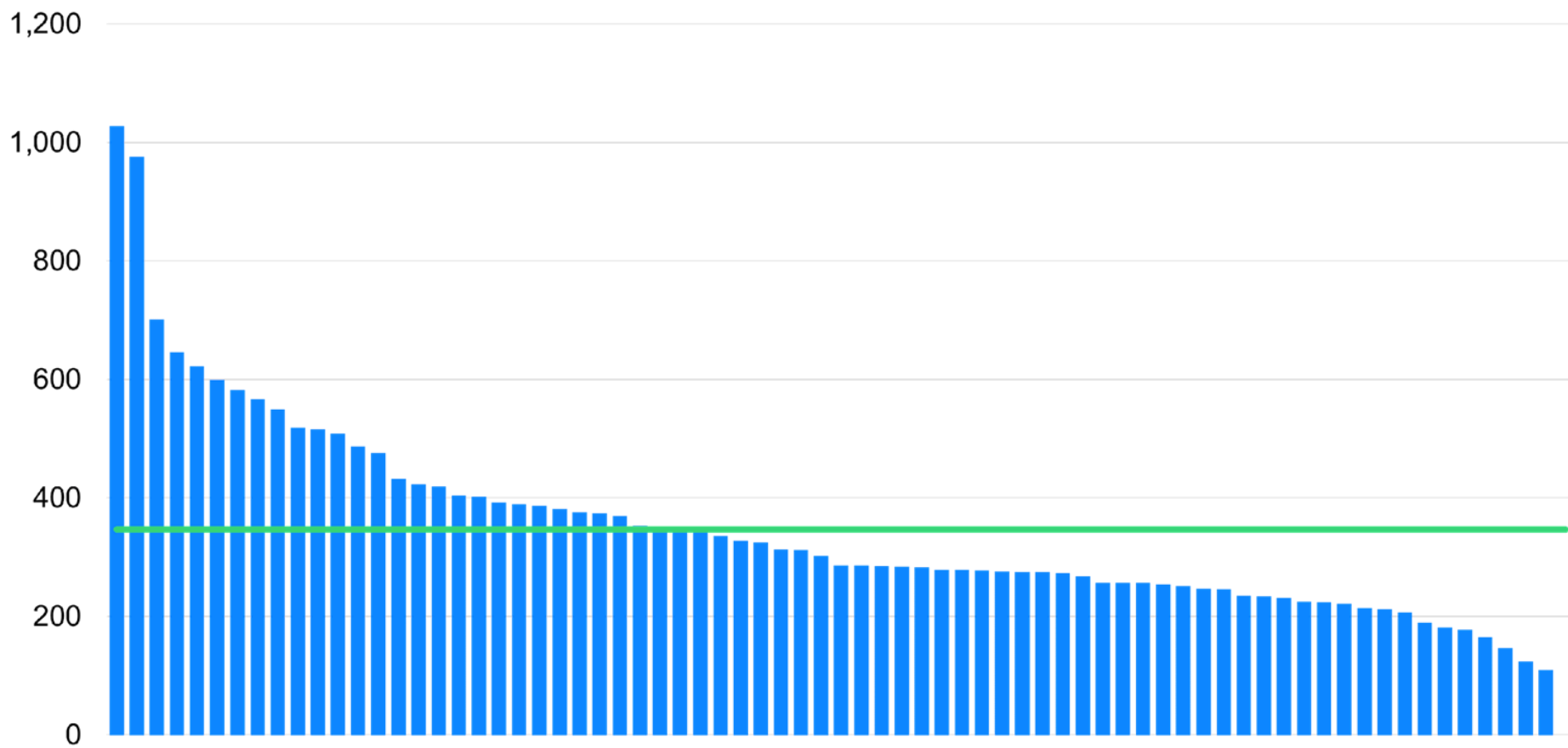
# Dispensing

## Number of prescription lines per 100 beds

	Mean (2022)	Mean (2021)	Mean (2020)
Outpatients	12,214	10,094	13,112
Discharge	16,690	16,890	18,625
Inpatients	16,583	15,018	14,928
Day case	1,808	1,554	1,656

# Homecare

## Number of patients supported by homecare per 100 beds

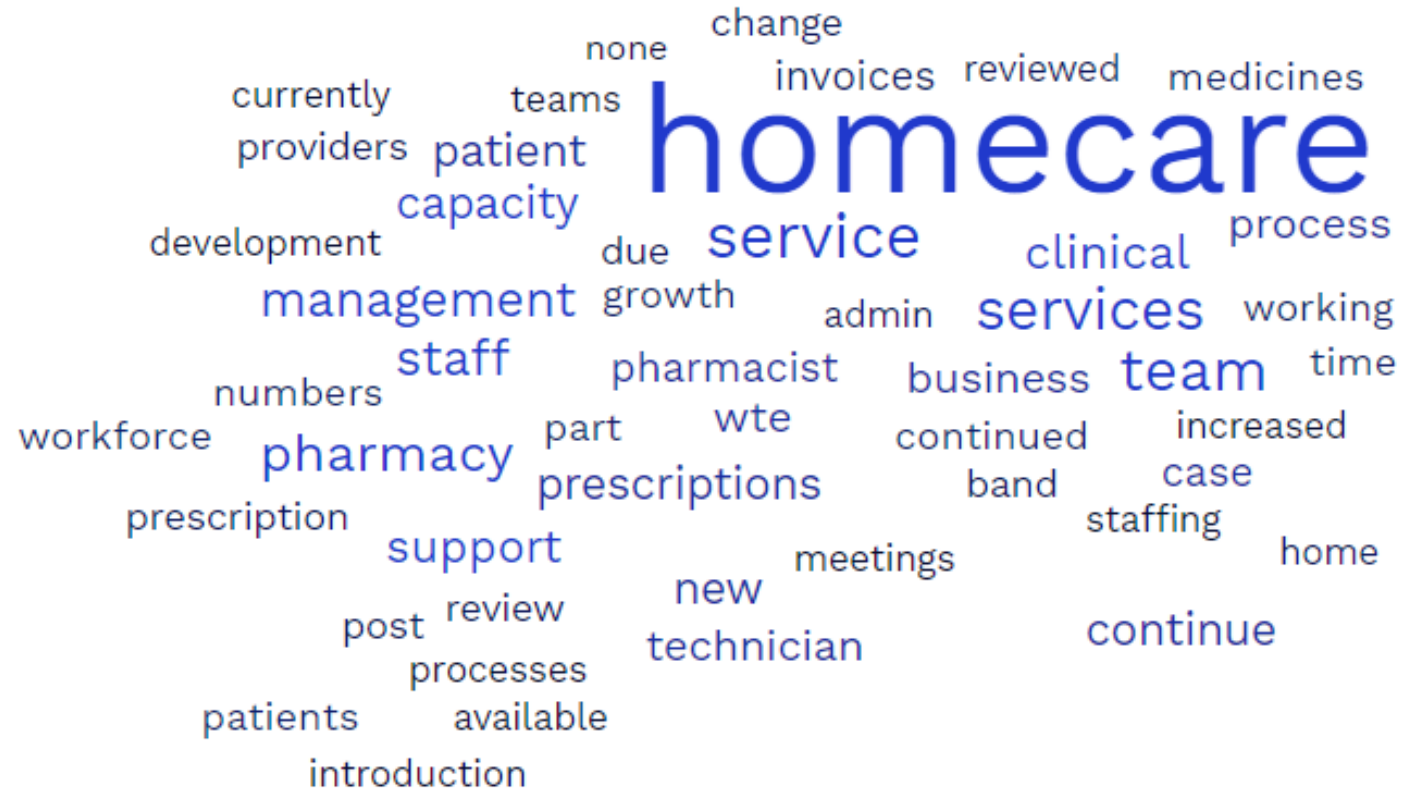


Year	Mean
2022	347
2021	327
2020	284
2019	242
2018	202



# Homecare

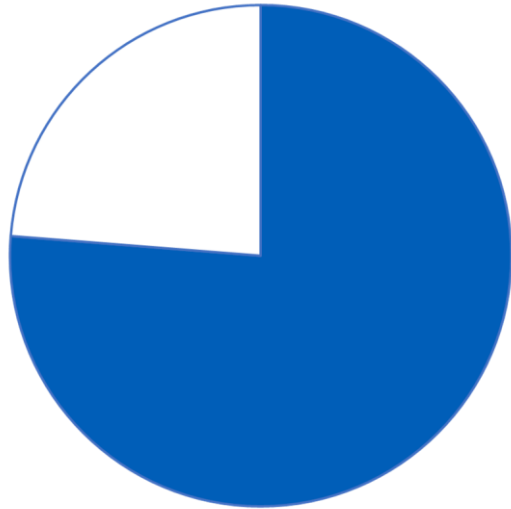
**What changes have been made to the organisation's approach to homecare in the past 12 months that you intend to keep going forward**





# Medicines information

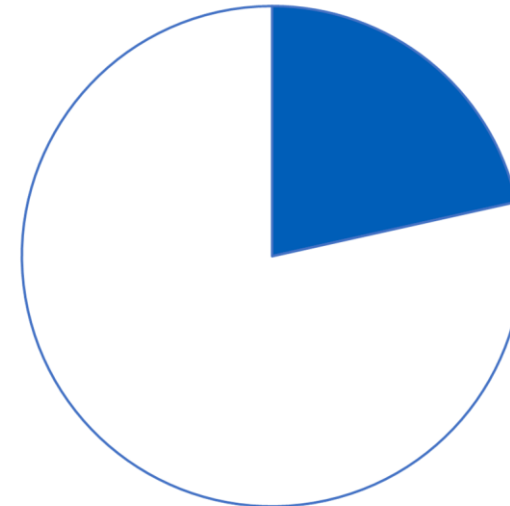
Does your organisation have a defined medicines information service/team?



% Yes 76%

63% in 2021

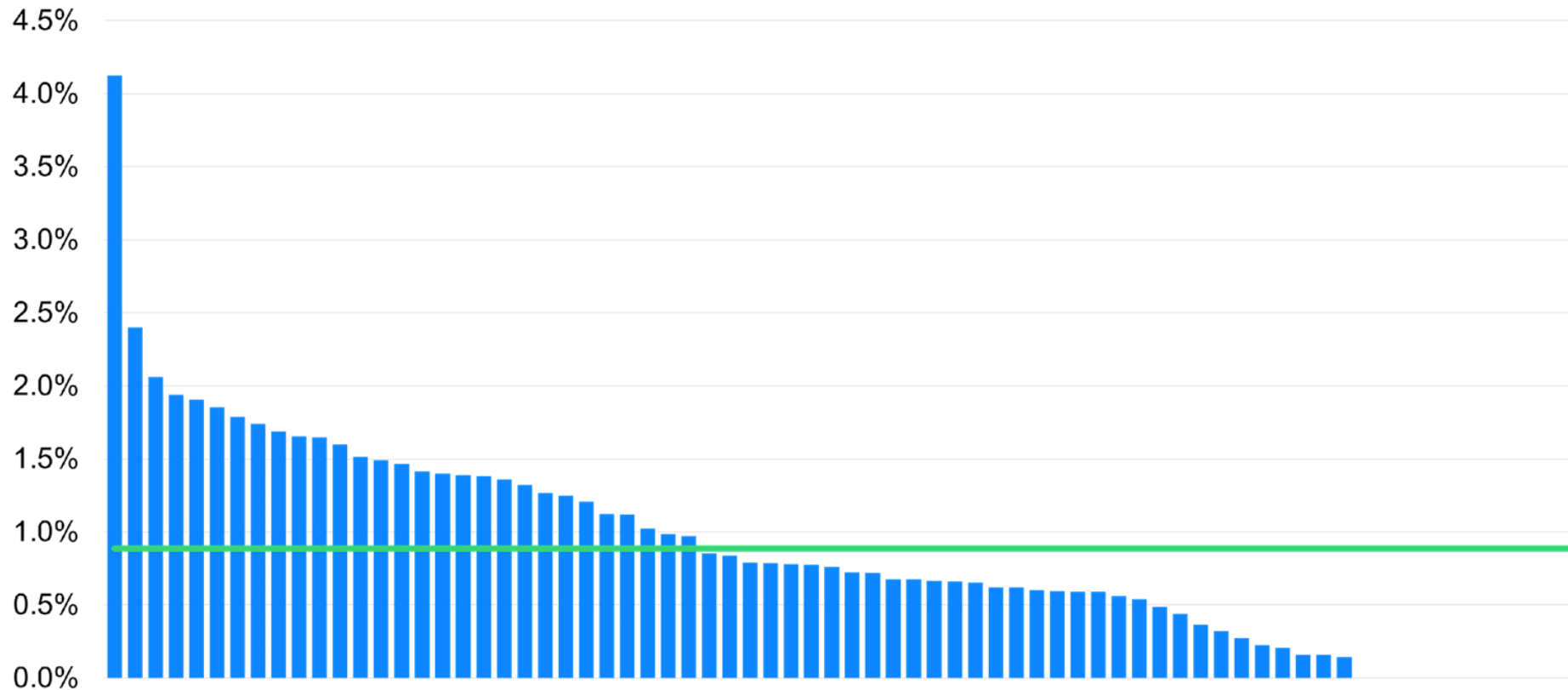
Does your organisation provide a medicines information service to any other NHS Trusts?



% Yes 22%

# Medicines information

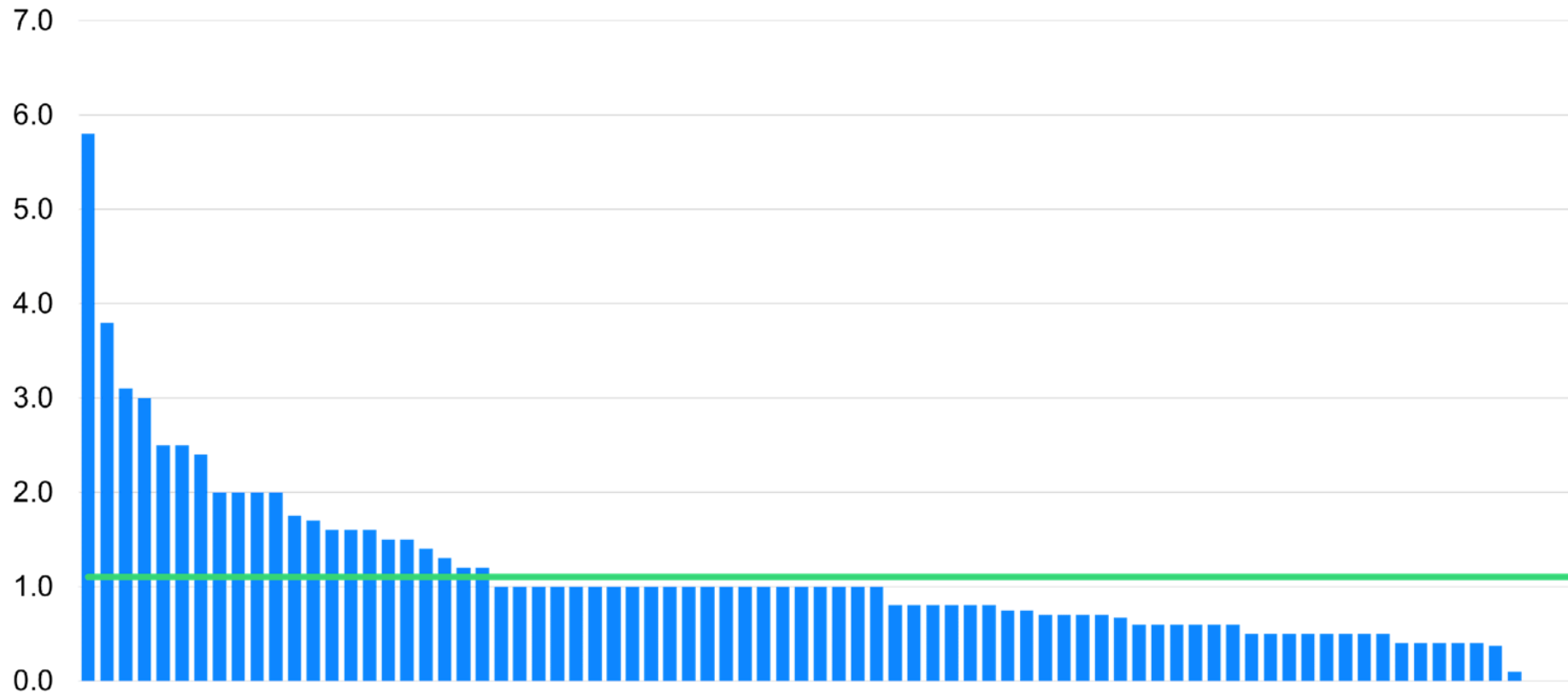
## Medicines information WTE as a % of total WTE Pharmacy staff



Year	Mean
2022	0.9%

# Antimicrobials

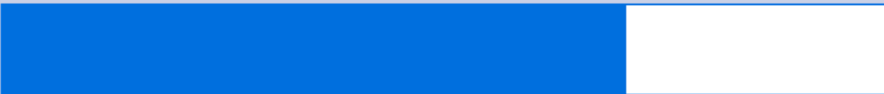
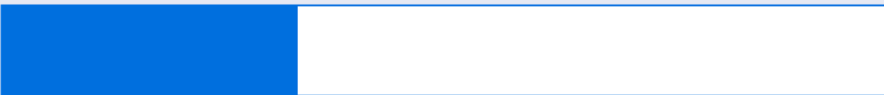
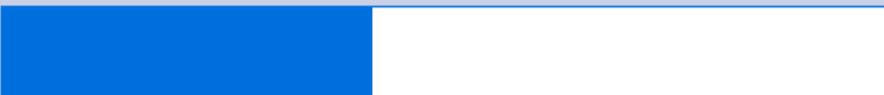
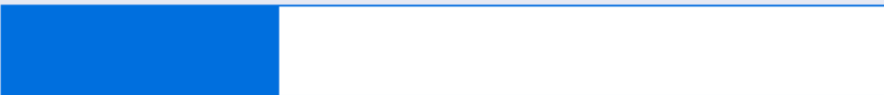
Specialist microbiology pharmacist time (WTE Band 8+) protected for antimicrobial stewardship or optimising prescribing (unbenchmarked)



Year	Mean
2022	1.1
2021	1.0

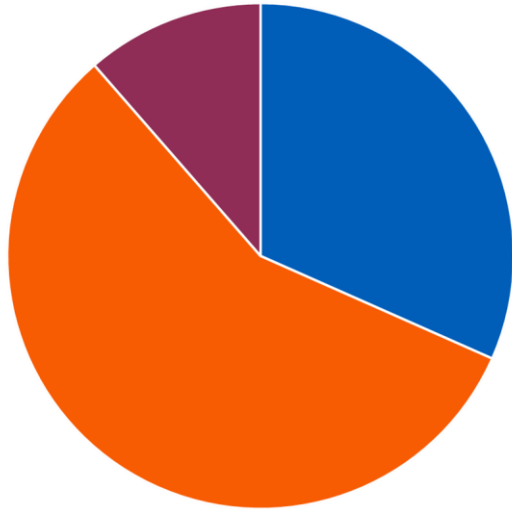
# Antimicrobials

## Training

		% Yes (2022)	% Yes (2021)
Do all prescribers receive mandatory training in prudent antimicrobial use at induction?		70%	68%
Do all prescribers receive mandatory training in prudent antimicrobial use at least once every three years?		33%	33%
Do all clinical staff receive mandatory training in prudent antimicrobial use at induction?		42%	44%
Does your organisation employ a Pharmacist in an antimicrobial stewardship role who has completed (or is currently undertaking) formal post-graduate training with a higher education institute, at Diploma/Masters level or above, in medical microbiology, infectious diseases, infection management or a similar discipline?		31%	43%

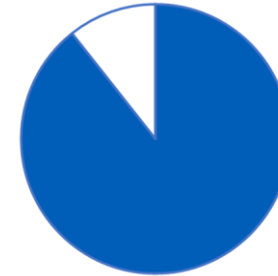
# Antimicrobials

Is serum procalcitonin testing available in your organisation?



Yes (unrestricted)	32%
Yes (restricted)	57%
No	11%

Does your Microbiology service use a MALDI-TOF system for rapid identification of micro-organisms for the majority of clinical specimens?



% Yes 89%

81% in 2021

Does your Microbiology service use a system for automated culture and susceptibility reporting for the majority of clinical specimens (e.g. Vitek)?

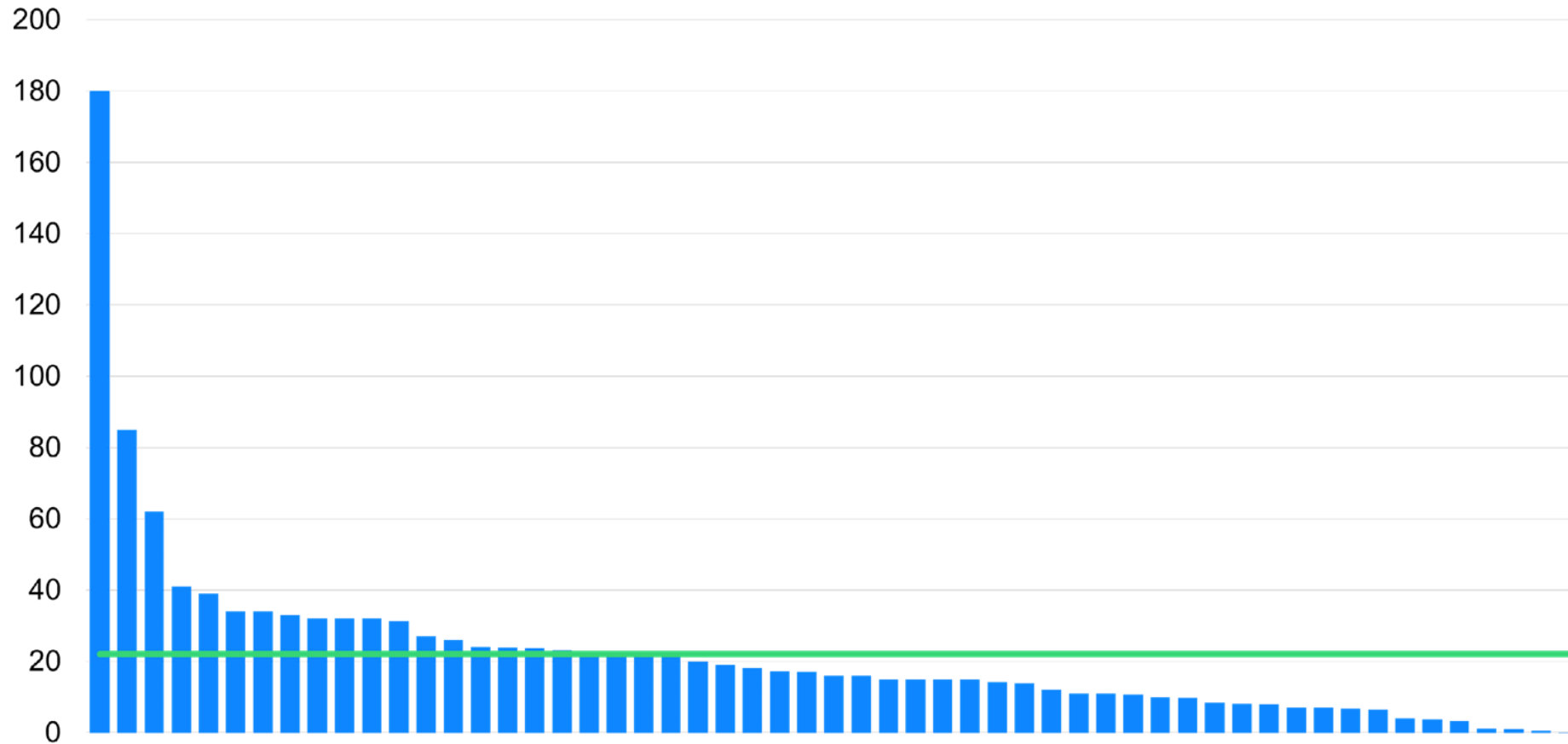


% Yes 71%

68% in 2021

# Medicines safety

## Number of dispensing errors per 100,000 dispensed items



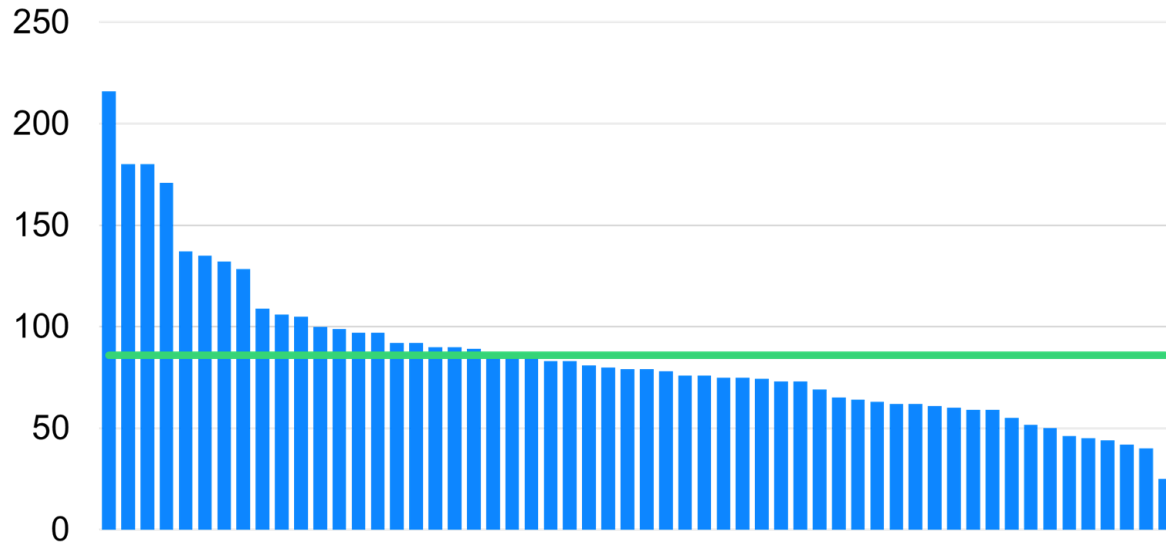
Year	Mean
2022	22
2021	19
2020	19
2019	19
2018	21
2017	20



# Quality

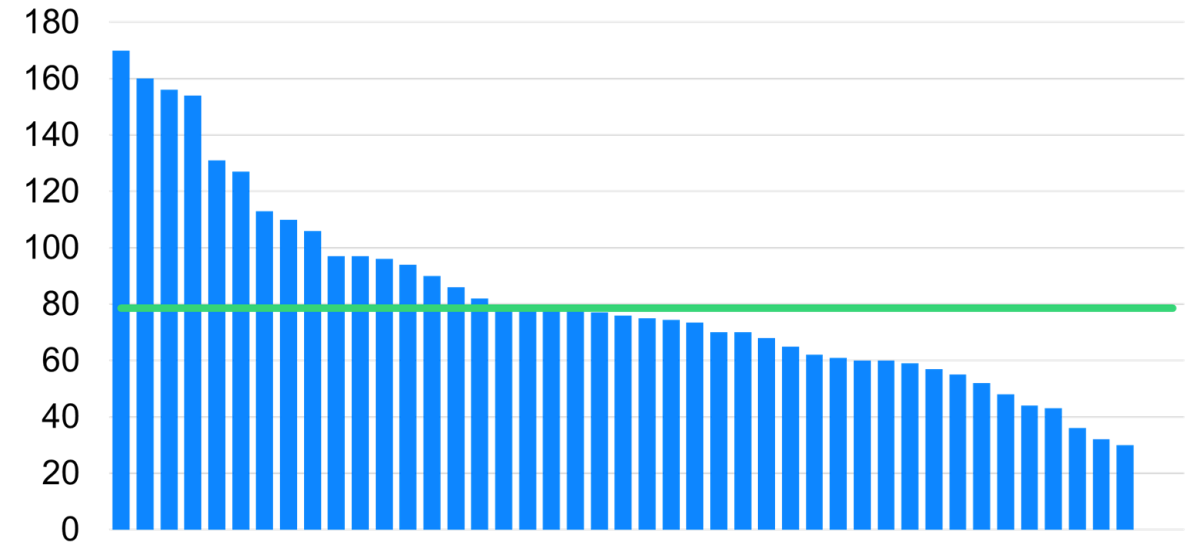
## Average discharge prescription turnaround time (mins)

### Weekday



Year	Mean
2022	86 mins
2021	82 mins
2020	81 mins

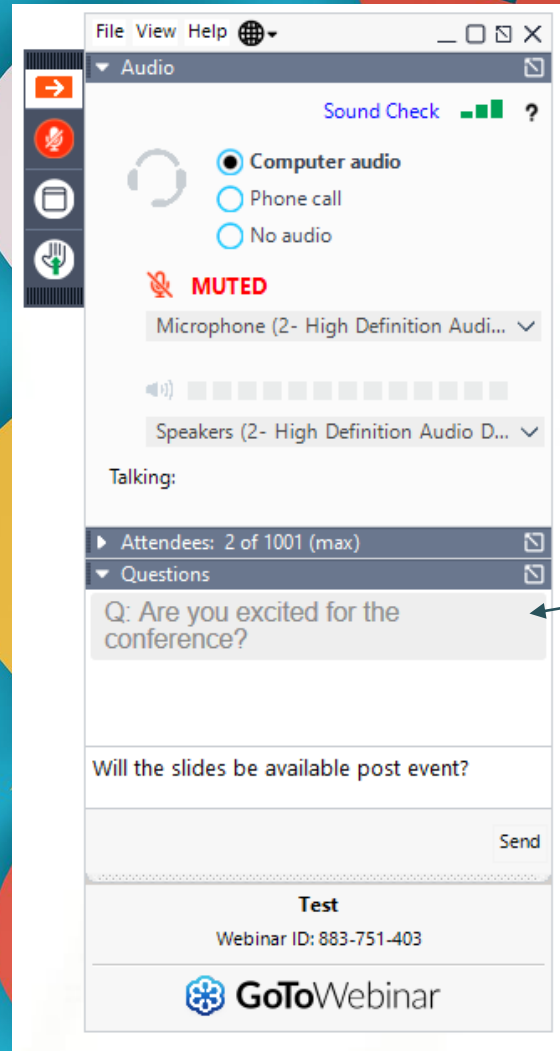
### Sunday



Year	Mean
2022	79 mins
2021	84 mins
2020	77 mins



# Concluding remarks and next steps



If you have any questions or comments for Speakers across the day, please expand the Questions Section on the GoToWebinar panel. You will not be able to see each others questions.



# NHS Medicines Optimisation Conference 2022



## SPEAKING NOW

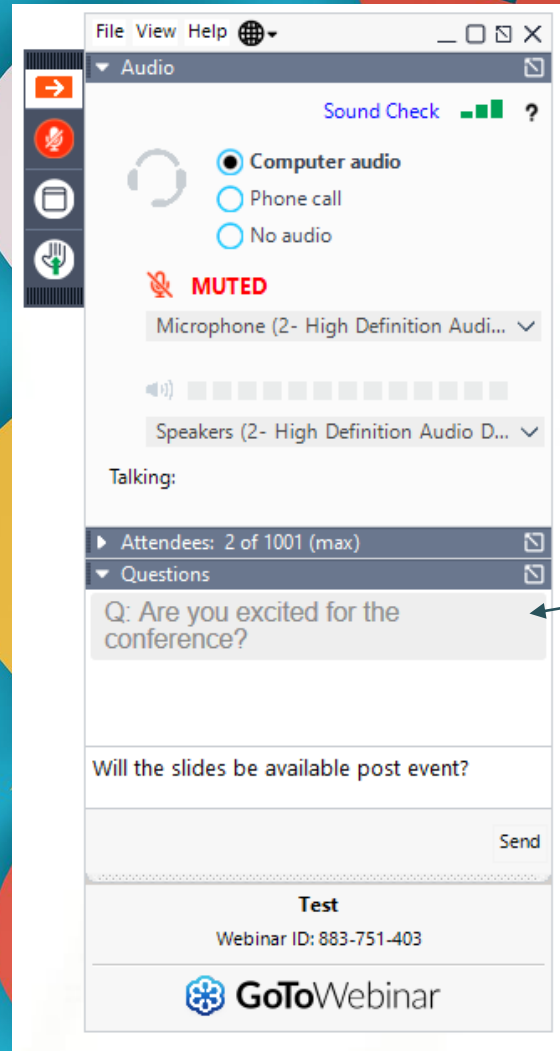


Professor Simon Maxwell

Professor of Student Learning - Clinical Pharmacology &  
Prescribing at University of Edinburgh

### I will be discussing...

“Prescribing Safety Assessment  
(PSA): Promoting basic  
competency of new doctors to  
prescribe and supervise the use  
of medicine”



If you have any questions or comments for Speakers across the day, please expand the Questions Section on the GoToWebinar panel. You will not be able to see each others questions.





# THANKS FOR ATTENDING



## NHS Medicines Optimisation Conference 2022





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