

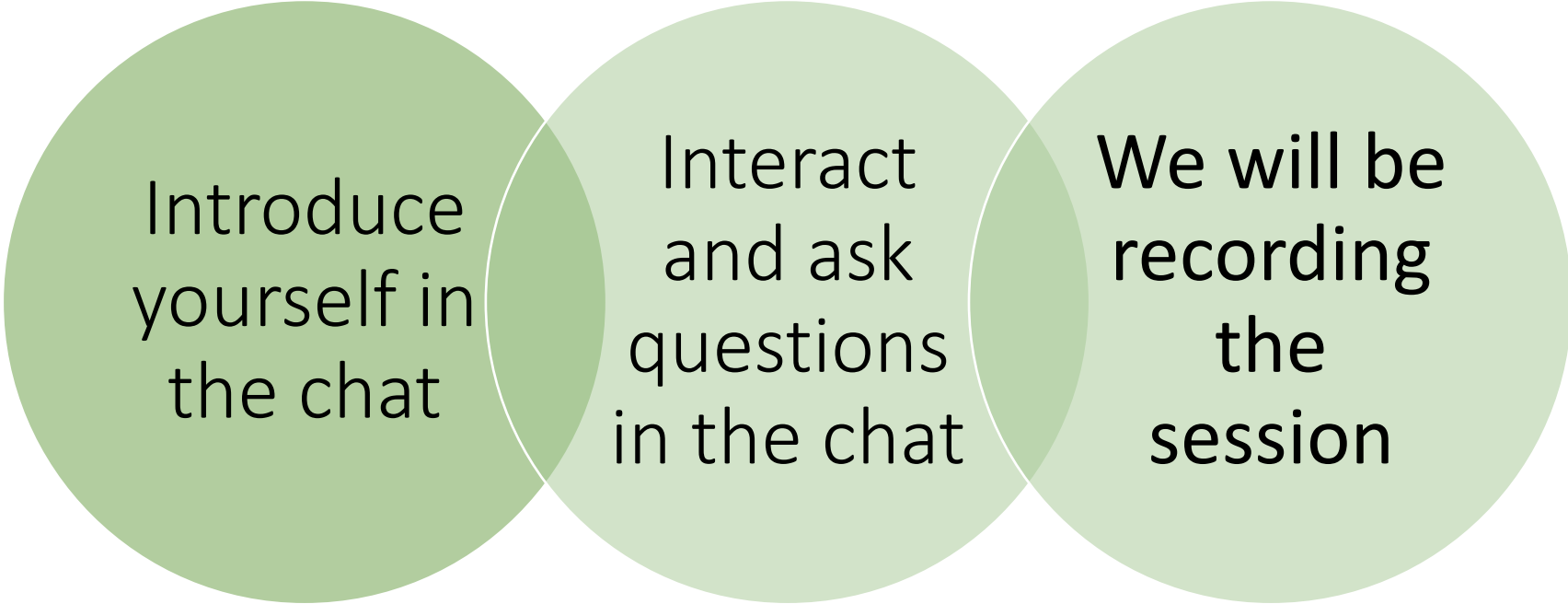
Safer use of time critical medicines webinar

Tuesday 1st July 2025

The first stop for professional medicines advice

Welcome & Introductions

Housekeeping



Introduce
yourself in
the chat

Interact
and ask
questions
in the chat

We will be
recording
the
session

Learning outcomes

- ☐ Understand the challenges surrounding time critical medicines
- ☐ Update on the Safer Use of Time Critical Medicines Programme, including work done so far and next steps
- ☐ Increase awareness of potential improvement interventions for the safer use of time critical medicines

Time critical medicines

Tony Jamieson

Patient Safety Specialist & Clinical Improvement Lead

Medicines Safety Improvement Programme, NHS England

The medicines safety improvement programme aims to address the most important causes of severe harm associated with medicines, most of which have been known about for years but continue to challenge our health and care systems.



Background




National Patient Safety Agency

Rapid Response Report

NPSA/2010/RRR009

From reporting to learning 24 February 2010

Reducing harm from omitted and delayed medicines in hospital

Background

PARKINSON'S
CHANGE ATTITUDES.
FIND A CURE.
JOIN US.

Helpline 0808

800 0303

Information and
support

Get involved

Get It On Time



About HIV

Who we are

What we do

Support us

Latest

News

Statement: Medication on time, every time:



RCEM
Royal College
of Emergency
Medicine

TIME CRITICAL MEDICATIONS

2023-26 NATIONAL QUALITY IMPROVEMENT
PROGRAMME

Medication Response Report

R009



Home

About us

Find and compare services

Home

> Guidance for providers

> Adult social care: information for providers

Time sensitive medicines

Page last updated: 13 January 2025

Categories: Organisations we



The first stop
for professional
medicines advice

Guidance **Events** Planning Training Publications Tools Q Search

Next events Past Events

[Medication safety across the system: time critical medicines](#)



Health Services Safety
Investigations Body

Investigation report

**Medication not given: administration of
time critical medication in the**



ASSOCIATION OF
AMBULANCE
CHIEF EXECUTIVES



Royal College of
Emergency Medicine

Time Critical Medications

- M**ovement disorders - Parkinson's / myasthenia medication
- I**mmunomodulators including HIV medicines
- S**ugar - diabetes medication
- S**teroids - Addison's and adrenal insufficiency
- E**pilepsy - anticonvulsants
- D**irect Oral Anticoagulants (DOACs) and warfarin



A MISSED dose can harm your patients!

The problem

Patients suffer harm, distress and increased length of stay, and staff experience increased pressure, when patients don't get their time critical medication on time due to failure of medication processes

1 in 17 patients die
as a result of problems with
time critical medicines
during their inpatient stay

67% increase in length
of stay

Safer Use of Time Critical Medicines Programme

- Part of NHS England's Medicines Safety Improvement Programme
- Led by SPS time critical medicines team
- Aims to improve the safer use of time critical medicines

The Journey

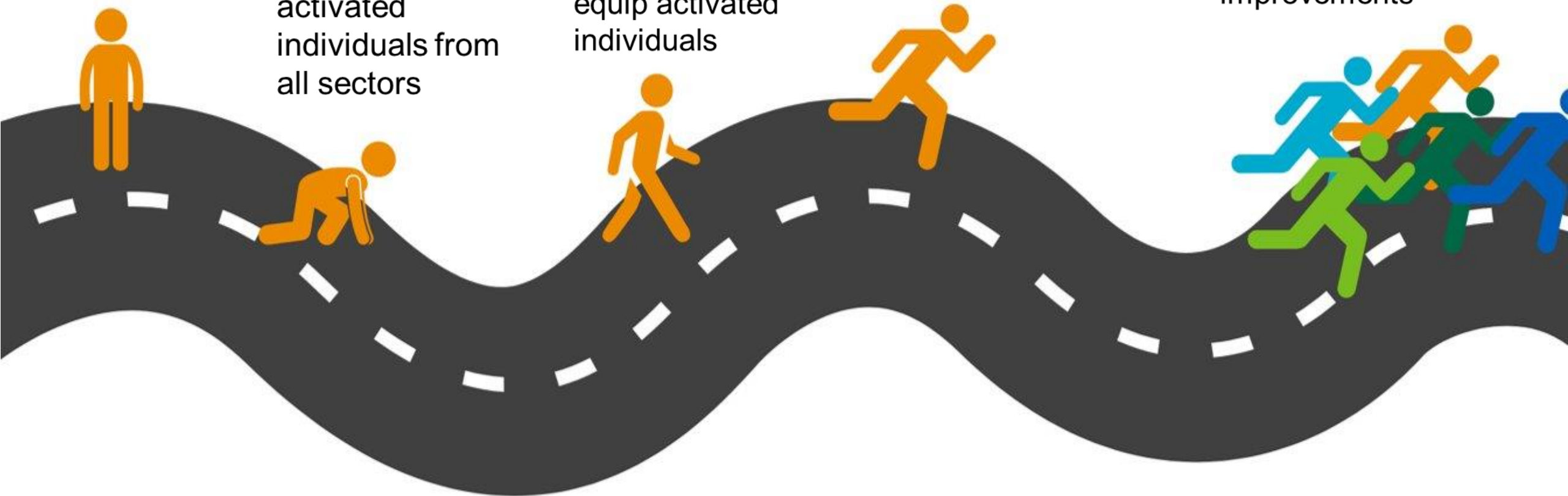
Inefficient silo
working

Bringing together
activated
individuals from
all sectors

Inspire and
equip activated
individuals

System-wide
responses to safer use
of time critical
medicines

A community of
activated individuals
and teams, delivering
sustainable and
innovative
improvements



Time Critical Medicines A Carer's Perspective

Safer Use of Time Critical Medicines Programme

Safer Use of Time Critical Medicines Programme Team

Key principles of the programme

Proactive identification of patients at first contact with the service and identification of their needs throughout the entirety of their journey



Time critical medicines are prescribed, available, prepared and administered on time every time



Data, both real time and retrospective, must be available for staff to respond to their patient's needs



The patient, family and carers' voice is a powerful driver and people are enabled and empowered to take responsibility for their time critical medicines



Our journey so far



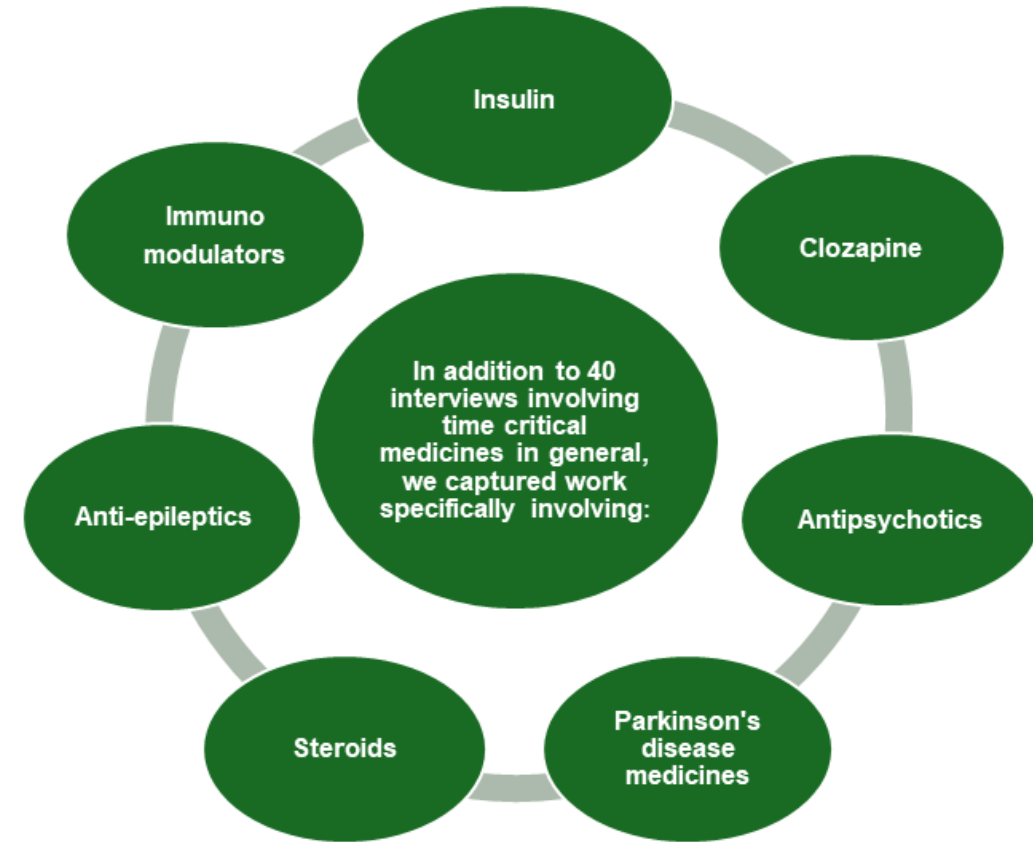
Appreciative inquiry

80 interviews

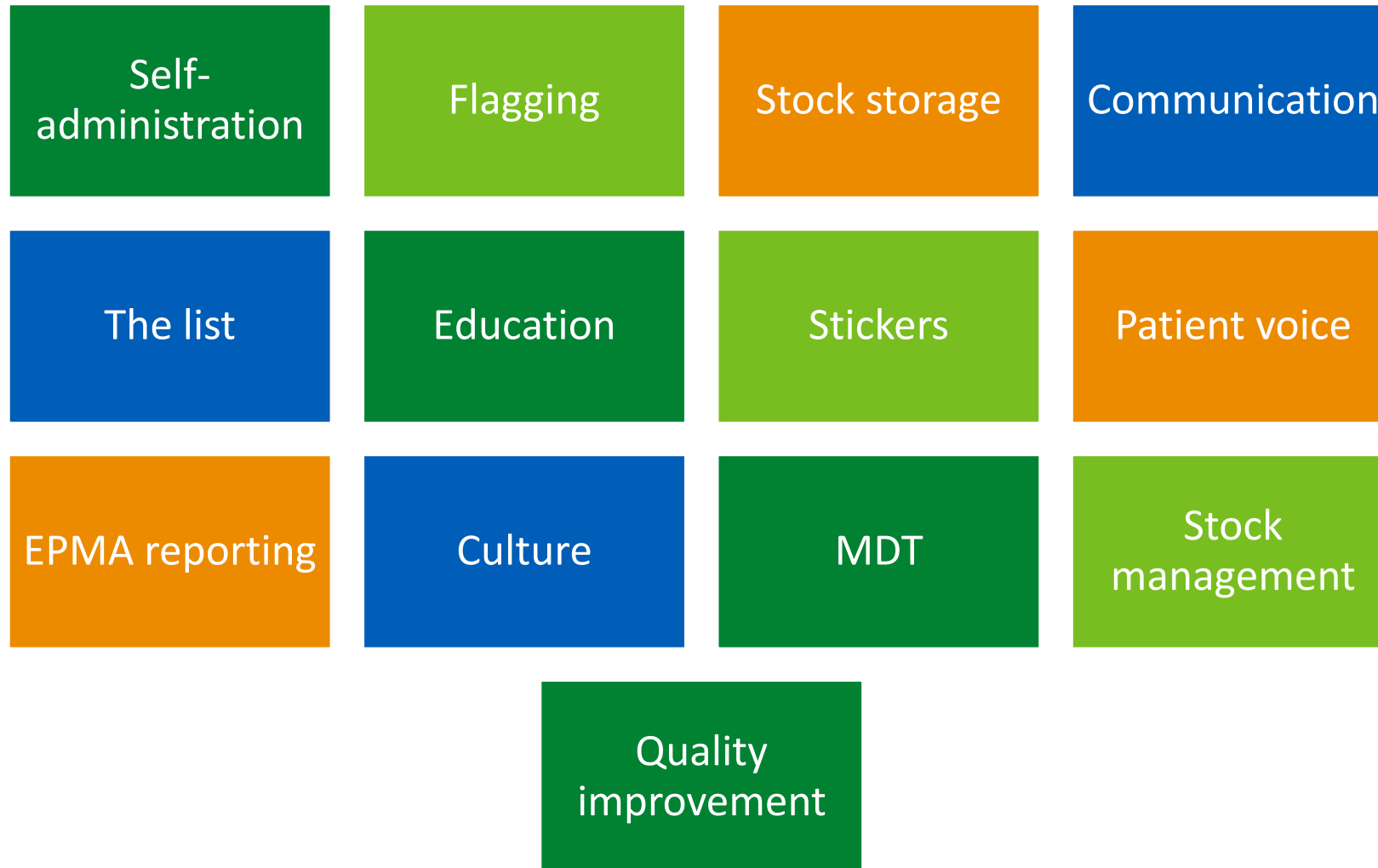
Interviews represent work being done across varied organisations with the highest representation from Acute trusts

Engagement from all geographical regions

Stakeholders from a wide range of professional backgrounds



Appreciative inquiry analysis



Driver diagram

Improve the reliability of the prescribing, administration and supply of time critical medicines in NHS Trusts

Primary drivers

People Involvement

Electronic data capture

Flagging

Access to Medicines

Secondary drivers

An empowered patient and carer voice

Executive Leadership

Governance and project management

Shop floor MDT

Audit & Feedback

Benchmarking

Monitoring

Dashboards

Identification on transfers of care

Flagging on EPMA

Real time notification

Self administration

Stock management

Stock storage

Education & Communication

Measurements

- No universal time critical medicines (TCM) definition, adds to complexities to measure improvement
- Agree scope & aim of project at the start
- Baseline data collected before improvement journey
- Organisations have resources to support with measures for TCM



Time Critical Medications at LTHTr

Judith Argall – Medicines Safety Officer
Sophie O'Dolan – Medicines Safety Pharmacist

The % target for missed doses to be set throughout the Trust
for CRITICAL MEDICATIONS is below **1%**



Introduction

Delayed and omitted doses of medicine pose a threat to patient well-being and can lead to patient harm, therefore should be avoided wherever possible.

The NPSA published an alert “Reducing Harm from delayed and omitted medicines in Hospital” in February 2010 and reducing missed doses therefore became a key Medicines Safety initiative at LTHTr.

Medication-related incidents remain one of the most frequently reported categories of patient safety incidents, accounting for around 8% locally within the trust.

Ensuring medicines aren't omitted reduces the risk of harm from administration errors and also prescribing errors as this work also affects duplicate doses.

Key aims and objectives



To reduce medication omissions across inpatient areas to less than 1% for critical medications.



To ensure that all staff know how to identify when a dose of medication is omitted, how to document the reason for an omission and the processes that they should follow to ensure medications are given to patients in a safe and timely manner.



To develop a sustainable system for data collection and monitoring

How did we set out to achieve

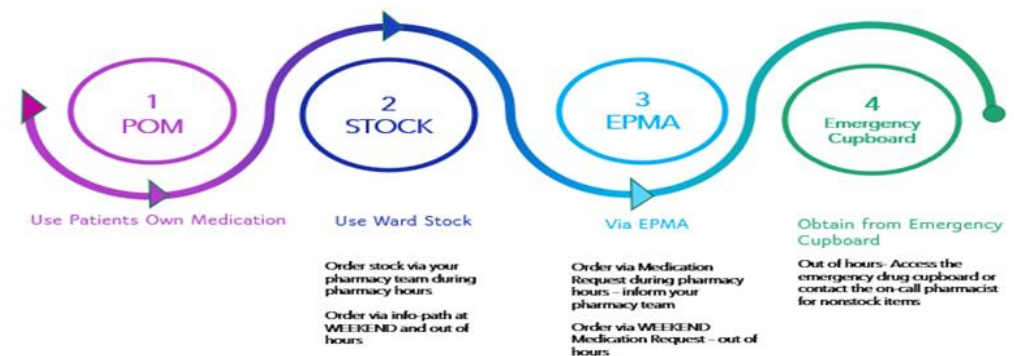
- Used CI methodology to engage an initial set of wards to work within a traditional collaborative approach. We met regularly as a collaborative and supported ward staff to test PDSA cycles and share outcomes and learning, together building a change package that we could later scale up and spread to further areas across the trust.
- Worked with senior nursing colleagues to agree appropriate outcomes and the 1% target threshold.
- We developed a BI dashboard which showed live data of delayed doses from EPMA that updated every 15 minutes – which identified doses of critical medicines that had been omitted with and without a valid reason. Worked in conjunction with BI and IT teams to ensure the data included was accurate and easily interpreted.
- Created a Trust SOP for Medication Omissions to ensure all areas were clear on what actions to take regarding medication omissions, ensuring clear messaging and prioritising patient safety.
- The progress was tracked through the individual wards via the CI project and then later included within the Pharmacy Medication Safety audit conducted monthly on all ward areas and reported to Medicines Governance Committee and divisional Always Safety-First meetings.

Barriers

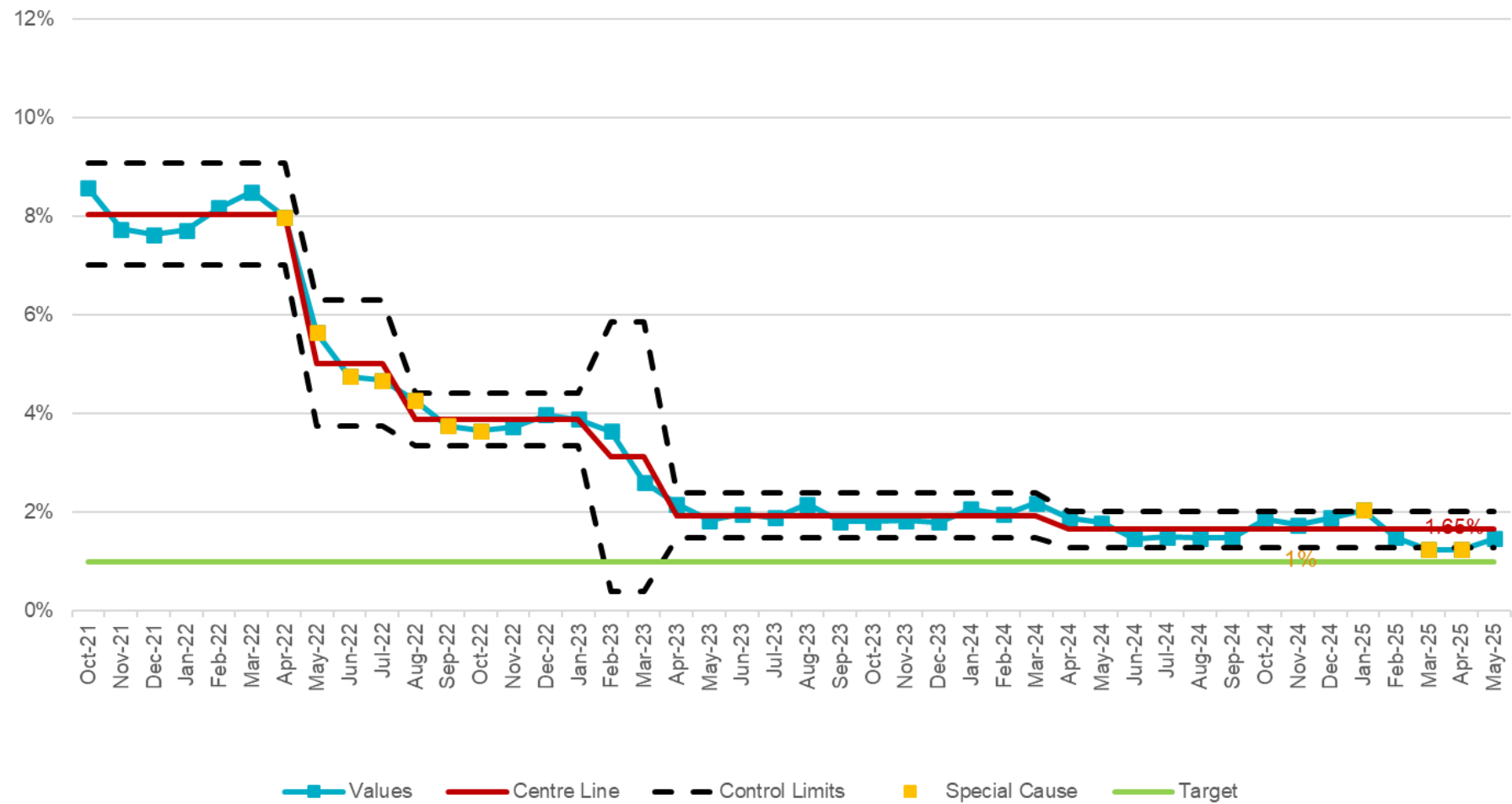
- Engagement with nursing team and blurring lines of responsibility for ensuring patients received doses on time.
- IT/BI app system restrictions and testing
- No national standard for definition of missed dose or what proportion of omitted doses is acceptable

Successes

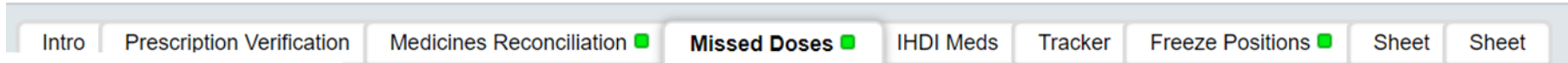
- Making the data public to all wards and then celebrating success when they achieved (e.g. by putting posters up on the ward), this encouraged nurses to want to continue to do the work and do well.
- Missed doses seen as high priority at the trust.
- Ordering system developed to promote safe supply of medications.



Critical Missed Doses > 2 hours excluding valid clinical reasons



Missed Doses BI app



- Updated every 15 minutes
- Doses included are for a 24-hour period
- Can be filtered by ward and by medication type
- Gives real time missed dose information

Missed Doses

Last Reload - 12/06/2025 09:48

Selections...

Site ☐

Ward ☐

Order Type **CRITICAL MED**

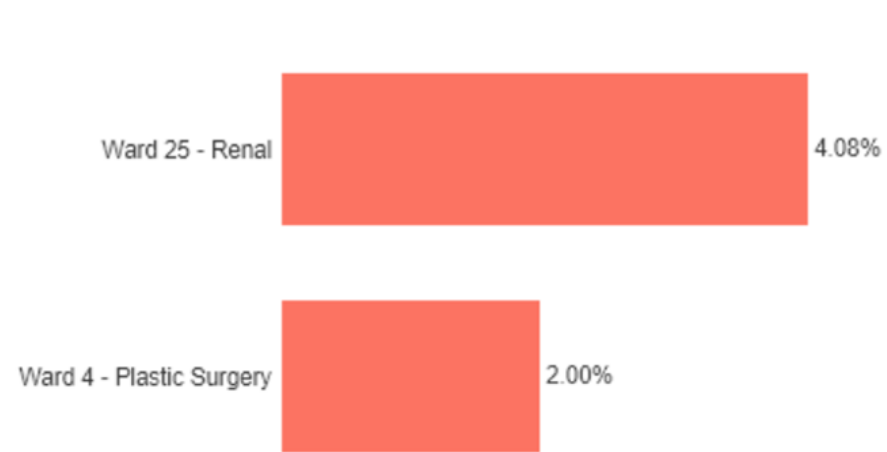
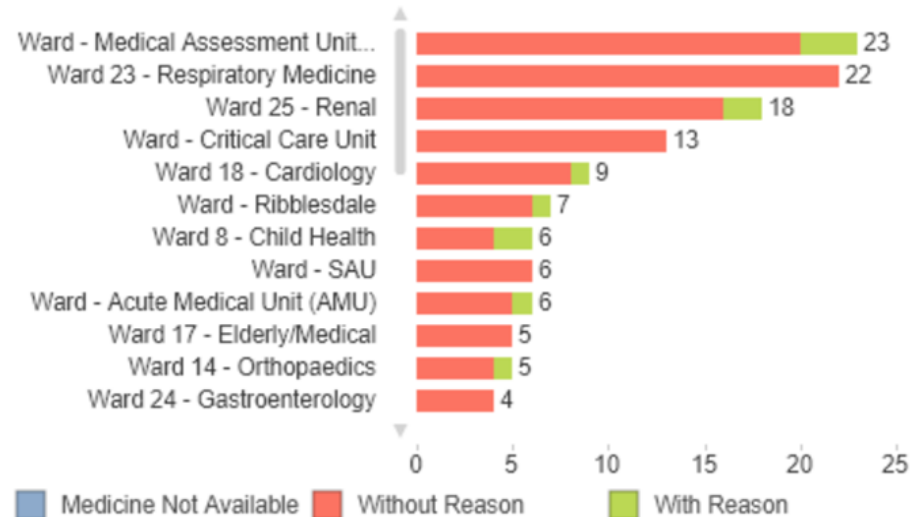
Enteral Flag NOT ENTERAL

Missed Dose - Medicine Not Available	Missed Dose - Without Reason	Missed Dose - With Valid Reason	Total Missed Doses	Total Doses	% Doses Missed Without Valid Reason >2hr
1	144	22	167	1469	0.20%

Missed Doses - 167



% Doses Missed Without Valid Reason - 0.20%



LTH Applications
 Web Slice Gallery
 Suggested Sites (11)
 VerseOne CMS v5
 Nexus Intelligence
 Home | Lancashire...

Clear
 Back
 Forward
 Reload
 Home
 Lock
 Unlock
 Check
 Print
 Add
 Star
 Star

Select Bookmark
 Select Report
 More

Intro
 Prescription Verification
 Medicines Reconciliation
 Missed Doses
 IHD1 Meds
 Tracker
 Freeze Positions

Missed Doses

Last Reload - 28/07/2021 11:28

Selections...

Ward
 Critical Med
 Enteral
 Reason Flag

☐
☐
☐
☐

Missed Dose - Medicine Not Available	Missed Dose - Without Reason	Missed Dose - With Valid Reason	Total Missed Doses	Total Doses	% Doses Missed Without Valid Reason >2hr
18	466	230	714	4073	8.69%



Intro		Prescription Verification		Medicines Reconciliation ☐		Missed Doses ☒		IHDI Meds		Tracker		Freeze Positions ☒		Sheet		Sheet	
Missed Doses Last Reload - 22/07/2022 14:02 Selections... Site Ward Order Type Enteral Flag ☐ ☐ CRITICAL MED NOT ENTERAL																	
Missed Dose - Medicine Not Available				Missed Dose - Without Reason				Missed Dose - With Valid Reason				Total Missed Doses		Total Doses		% Doses Missed Without Valid Reason >2hr	
5				42				36				83		1381		3.40%	

$$\% = \frac{\text{Medicines Not Available} + \text{Missed without reason} > 2 \text{ hours}}{\text{Total Doses}}$$

When to check

- After each Medication Round check the BI portal (or EPMA missed medication report)
- Any medications which have not been given should be highlighted to the RGN.
- The RGN should take the following actions
 - a) Give the medication as soon as reasonably possible
 - b) Reschedule the dose
 - c) Document a reason on EPMA to why the medication is missed

Tips for wards to achieve under 1%

- Always reschedule and enter the appropriate reason for any missed medications – these will not count towards your data
- Be aware of how to order inpatient medication
- Ensure all relevant staff have access to the BI Portal

Discussion

- The project has dramatically decreased the number of medication omissions at LTHTr, ensuring that our patients receive the best care possible during admission and reducing avoidable harm.
- This has been achieved by collaborative working with nursing, pharmacy, IT and CI teams – to ensure accurate data was available to ward teams, appropriate documentation of missed doses when this was clinically appropriate and prioritising the supply of critical medications that were not available at ward level.
- Using the Medication Safety Audits to monitor progress has given the project visibility to the divisional teams and has worked as an additional method to motivate wards to use the tools available to ensure patients receive medication as it is prescribed. It has also allowed us to provide specific support to areas that are not achieving the target level and identify barriers to achieving the target.
- This project has been a success and has ensured that medication safety and safe medication administration is at the forefront of all our healthcare professionals minds.
- This project was also proudly a HSJ Patient Safety Awards Nominee

HSJ
**PATIENT SAFETY
AWARDS 2023**



Time Critical Medications at LTHTr

Judith Argall – Medicines Safety Officer
Sophie O'Dolan – Medicines Safety Pharmacist



Cornwall Partnership
NHS Foundation Trust

Time Critical Meds A QI Approach

Kylie Lock, Quality Lead



Lynne Osborne
Nurse Consultant



Luke Huntley
Pharmacist



Jacqui Chamberlain
Parkinson's Nurse Specialist



Kylie Lock
Quality Lead

Outstanding care for all



Objective and Background

Luke Huntley, Pharmacist, at Newquay hospital noticed the considerable difference in one of his patients with Parkinson's disease, when he wasn't receiving his medication on time. Incorrect or missing drug doses can cause a decline in mobility and swallowing leading to an increase in the length of stay and increased level of dependence whilst in hospital.

In March 2021, we set out to ensure people with Parkinson's received their medication within 30 minutes of the prescribed time within our inpatient community hospitals.

Our approach

Model for Improvement



Measures

- Improved staff knowledge
- Awareness of time critical meds
- Data and reporting
- Patient survey and experience
- Engagement with Inpatient wards

Change Ideas



Weekly reporting with visual charts



Educational masterclasses



Quick scan posters to access videos



Celebrating success and WOW! Awards



Engagement with medicine management nurses



Pill timer packs

Patient Feedback



Cornwall Partnership
NHS Foundation Trust



“ I do not need to keep repeating everything when the ward staff have more knowledge about Parkinson's. This gives me reassurance that my medication will be given on time.

Inpatient quote ”

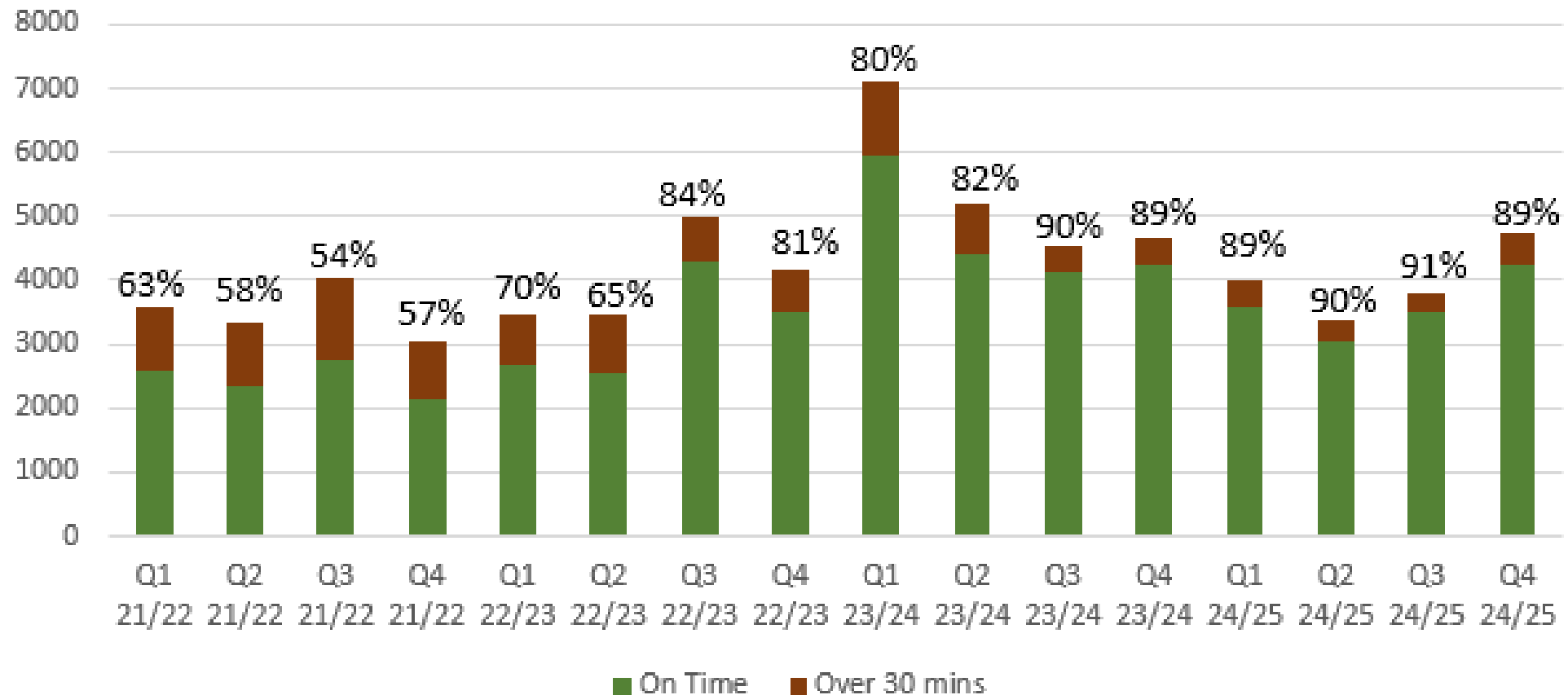
Empowered Quality improvement
Person centred
Skilled safe Knowledge Dependency
Caring Pill timer
Parkinson's
Nurses Education
WOW! Link nurse
Awards Symptoms
Innovation Medication Pharmacy
Achievement Staff Quality of life
Patient Team
Fantastic Wonderful

Results



Cornwall Partnership
NHS Foundation Trust

CFT Parkinson's Meds % On Time



Celebrating and Sharing Success



Cornwall Partnership
NHS Foundation Trust



Cornwall Partnership
NHS Foundation Trust

Parkinson's Service: Time Critical Medication QI Project

Project leads: Lynne Osborne - Consultant Nurse Parkinson's, Luke Huntley - Pharmacist, Jacqui Chamberlain - Parkinson's Nurse Specialist, Kylie Lock - Quality Lead,

Aim and Timeline for Delivery	Why is this important?	Measures and controls
To ensure Parkinson's patients within our inpatient settings receive their medication within 30 minutes of the planned time. The project commenced in March 2021 and has continued since. The aspiration is that we ensure the project work is embedded into the operational delivery on ACS Wards.	A delay in medication can lead to serious health implications for someone living with Parkinson's. Parkinson's UK data from shows there were 1075 admissions in Cornwall in 2021/22 compared to a national average of 910 admissions. The average length of stay for Parkinson's patients in Cornwall had risen by 21.4% compared to the previous year.	- Improved staff knowledge - Awareness of time critical medication - Reporting across all wards on weekly basis - Patient Survey - Staff Survey - Engagement with inpatient wards

Results	What we implemented																																																			
The chart below shows the percentage of doses administered on time within the 30-minute window. There has been a 26% improvement since the start of the project, and we have seen this sustained over the last 18 months. CFT Parkinson's Meds % On Time <table><caption>CFT Parkinson's Meds % On Time Data</caption><thead><tr><th>Quarter</th><th>On Time (%)</th><th>Over 30 mins (%)</th></tr></thead><tbody><tr><td>Q1 21/22</td><td>63%</td><td>37%</td></tr><tr><td>Q2 21/22</td><td>58%</td><td>42%</td></tr><tr><td>Q3 21/22</td><td>54%</td><td>46%</td></tr><tr><td>Q4 21/22</td><td>57%</td><td>43%</td></tr><tr><td>Q1 22/23</td><td>70%</td><td>30%</td></tr><tr><td>Q2 22/23</td><td>65%</td><td>35%</td></tr><tr><td>Q3 22/23</td><td>84%</td><td>16%</td></tr><tr><td>Q4 22/23</td><td>81%</td><td>19%</td></tr><tr><td>Q1 23/24</td><td>80%</td><td>20%</td></tr><tr><td>Q2 23/24</td><td>82%</td><td>18%</td></tr><tr><td>Q3 23/24</td><td>90%</td><td>10%</td></tr><tr><td>Q4 23/24</td><td>89%</td><td>11%</td></tr><tr><td>Q1 24/25</td><td>89%</td><td>11%</td></tr><tr><td>Q2 24/25</td><td>90%</td><td>10%</td></tr><tr><td>Q3 24/25</td><td>91%</td><td>9%</td></tr><tr><td>Q4 24/25</td><td>89%</td><td>11%</td></tr></tbody></table> Legend: On Time (Green), Over 30 mins (Red)	Quarter	On Time (%)	Over 30 mins (%)	Q1 21/22	63%	37%	Q2 21/22	58%	42%	Q3 21/22	54%	46%	Q4 21/22	57%	43%	Q1 22/23	70%	30%	Q2 22/23	65%	35%	Q3 22/23	84%	16%	Q4 22/23	81%	19%	Q1 23/24	80%	20%	Q2 23/24	82%	18%	Q3 23/24	90%	10%	Q4 23/24	89%	11%	Q1 24/25	89%	11%	Q2 24/25	90%	10%	Q3 24/25	91%	9%	Q4 24/25	89%	11%	- Weekly reporting sent to ward managers in data tables & visual charts – easy to read - Parkinson's educational masterclasses - Posters & videos shared to raise awareness about impact of delayed meds - Celebrating success / WOW Awards - Engagement with meds management nurses - Pill timers on inpatient wards - Roll out to MH wards and RCHT
Quarter	On Time (%)	Over 30 mins (%)																																																		
Q1 21/22	63%	37%																																																		
Q2 21/22	58%	42%																																																		
Q3 21/22	54%	46%																																																		
Q4 21/22	57%	43%																																																		
Q1 22/23	70%	30%																																																		
Q2 22/23	65%	35%																																																		
Q3 22/23	84%	16%																																																		
Q4 22/23	81%	19%																																																		
Q1 23/24	80%	20%																																																		
Q2 23/24	82%	18%																																																		
Q3 23/24	90%	10%																																																		
Q4 23/24	89%	11%																																																		
Q1 24/25	89%	11%																																																		
Q2 24/25	90%	10%																																																		
Q3 24/25	91%	9%																																																		
Q4 24/25	89%	11%																																																		
	Recommendations - Patient involvement in the project - Lunch & learn events - RIO to flag Parkinson's patients at admission - Guidance for management of Parkinson's patients in an inpatient ward - To implement medication self-administration - RCHT ED QIP – Time critical meds project.																																																			



**INNOVATION &
BEST PRACTICE
AWARDS**



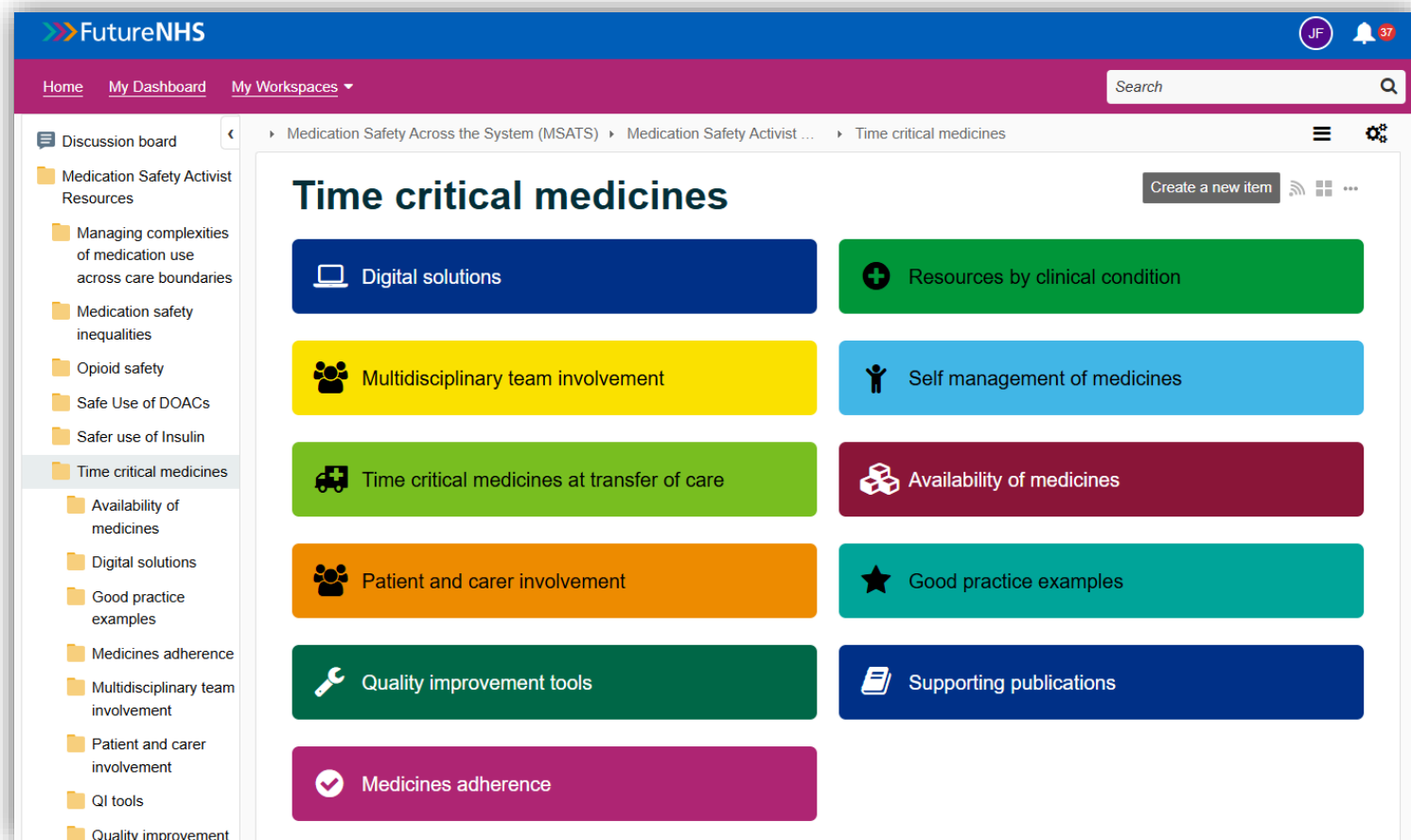
**PARKINSON'S
Excellence
Network
AWARDS 2023**

Top Tips

- Engagement with Stakeholders is key
- Think about your circle of control and influence
- Consider sustainability: What infrastructure do you have to monitor and support the project long term?
- Visual data and reporting has been our biggest win!

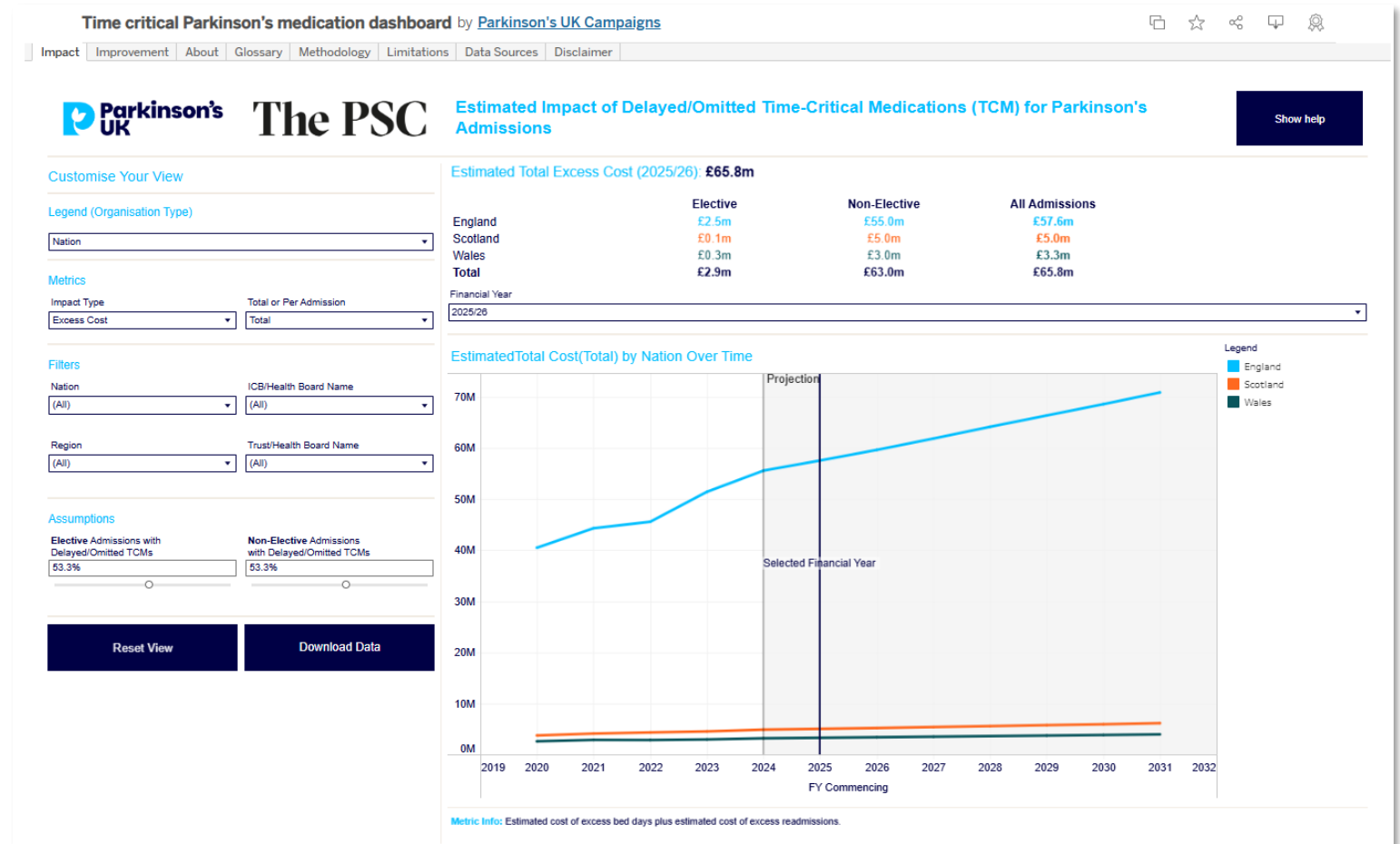
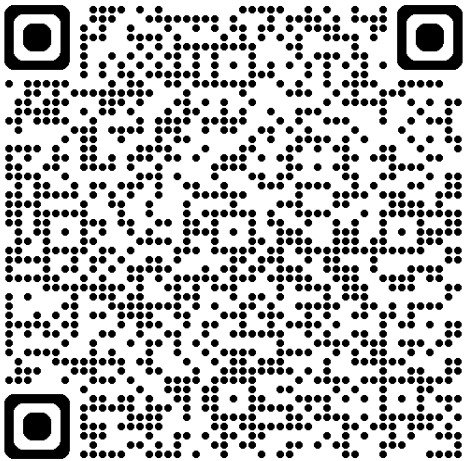
Time Critical Medicines Resources

Repository of shared resources



Parkinson's UK Dashboard

Estimates the direct cost for hospitals and the impact on patient outcomes of delays and omissions with Parkinson's medicines.



<https://www.parkinsons.org.uk/professionals/resources/unlock-value-timely-medication-parkinsons-uk-time-critical-medication>

SPS resources

Self-administration of medicines

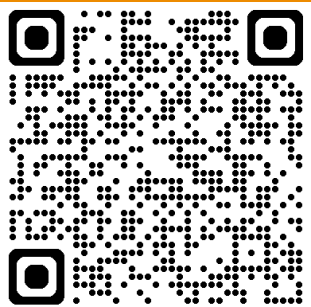
Supporting safe use of adrenal crisis emergency management kits

Ensuring time critical use of rasburicase

Clinical considerations for patients prescribed clozapine

Parkinson's disease medicines in swallowing difficulties

Articles on TCMs in development



Medicines supply tool (website registration required)

Latest information on supply issues, actions to take, alternatives to use, & expected resolution dates. Content provided by DHSC and MVA team, NHS England

Take away messages

- There is no one size fits all solution to improving the safe use of time critical medicines
- Improvement will involve multiple change ideas
- Involving the multi-disciplinary team, including patients, carers and families is crucial

Thank you to all our speakers and attendees

Please complete the evaluation form in the chat

