CASE STUDY

Patient Safety

CLINICAL AUDIT AWARENESS WEEK, 24-28 June 2024

Featuring the Clinical Audit Heroes Awards

HQIP Healthcare Quality Improvement Partnership

www.hqip.org.uk

WINNER: Northumbria Parkinson's Quality Improvement (QI) Project, Northumbria Healthcare NHS Foundation Trust

Improving the in-patient care of people with Parkinson's disease

Parkinson's disease (PD) is the UK's second most common neurodegenerative condition, with a person being diagnosed with the condition, on average, every hour. It is recognised that when a person with PD is admitted to hospital, delays in medicine administration have a significant impact on symptom control. Such delays are associated with poorer outcomes such as increased length of stay and worsening morbidity and mortality.

Project aims

Reduce delays in time critical medications to:

- Eradicate delays in administration of Parkinson's (PD) medicines of over 60 minutes
- Ensure that 95% of PD medicines are administered within 30 minutes.

> ***They demonstrated both innovation and impact far beyond the boundaries of their organisation. With a focus on patient experience alongside effectiveness and safety, this project was praised for its multi-disciplinary approach and patient engagement (using visual display to communicate key messages).***
>
> **Clinical Audit Heroes Awards Judging panel**

Project overview

A 2021 National Confidential Enquiry into Perioperative Deaths (NCEPOD) report examined swallowing when patients with PD were admitted to hospital. It identified widespread deficiencies in the care of such patients, with failure to screen for, to identify and to manage swallowing problems, resulting in medicines administration problems. The diversity of symptoms in PD means that gold-standard care of a person with PD necessitates a multi-disciplinary approach and thus, from the outset of this quality improvement (QI) project, the need for a diverse team was recognised. A multidisciplinary team consisting of speech and language therapists, nurses, pharmacists, patient safety experts, and senior and junior doctors was therefore assembled.

The changes that could be made to achieve this project's aims were employed iteratively using plan, do, study, act (PDSA) cycles, with outcome data regarding medicines being obtained via electronic prescribing software.

> ***The difference in his walking when the meds were late was just unbelievable. It makes me think what it must be like for our patients. I won't forget that.***
>
> **Staff Nurse (after watching a clinical safety briefing video, as part of this project)**

How was change achieved in practice?

1. Firstly, institutional commitment to this project was sought, through liaison with the trust board. There was widespread support for the project, resulting in it becoming one of the trust's annual safety and quality priorities for 2023-24 and 2024-25. As well as legitimising the project, this support facilitated dissemination of key messages, via a clinical safety briefing video that was circulated to all staff members.

2. The trust guidelines for PD were redesigned and made more practicable. These were launched in November 2022. They provided an overview of what the first 24 hours of a hospital admission ought to look like for a patient with PD. A guide to managing commonly encountered problems (e.g. "my patient with PD can't swallow their meds") was included.

3. A micro-teaching session, lasting only 3 minutes, was delivered across three intervention wards. The training had four key messages: Get it on time; Think swallow; Zero tolerance for missed meds; Contact the PD team. Teaching was opportunistically delivered to staff in their clinical workplaces, allowing us to reach all members of the multidisciplinary team. In total 172 staff across three wards attended the teaching and, since April 2024, 105 staff in the Emergency Department have also been trained. The 'micro-teaching' included video footage of a patient whose medications were 30 minutes late, displaying severe mobility problems. A second video showed the same patient 30 minutes later, but having had their medicines – strikingly, the person's walking was near normal.

SPOTLIGHT: Making SUSTAINABLE change

Whilst delivering micro-teaching sessions, staff with a particular interest in PD were sought out and a pool of 6 'local champions' was identified. These colleagues have since received additional training from the team and, to promote sustainability of the QIP, will continue to deliver ward-based teaching at intervals. This is particularly important given the high turnover of ward staff.

4. A screensaver, displayed on all trust computers when not in use, was launched to provide a visual reminder of the four key messages from the micro-teaching.

5. A key improvement was the development of an online medicine calculator – PDMedCalc. Launched in February 2024, this allows clinicians to calculate a non-oral equivalent dose for patients unable to take their usual oral medicines due to swallowing problems. Development of this MHRA-approved tool was supported by Parkinson's UK (the UK's leading PD charity), who signpost to it on their website. This was integrated into trust guidelines, and staff were signposted to it during micro-teaching. The calculator has averaged 3,650 unique visitors in a 30-day window, demonstrating the widespread uptake of the calculator beyond the Northumbria trust alone.

6. The electronic initial nursing assessment was amended to include a visual prompt to undertake a swallow assessment for a patient with PD. All staff groups were orientated to swallow training opportunities. This project strived to reconceptualise swallow assessment as not "just a nurse job", with the team actively encouraging and legitimising junior doctors' attendance at swallow training and seeking to role-model this mindset through senior doctors showing willingness to up-skill too. More recently, the term "nurse" has been removed from the "nurse bedside swallow assessment" to try and encourage a range of professionals to complete this assessment.

Evidence of improvement

Data for medication delays across each intervention wards was captured monthly, between January 2023 to May 2024.

- During this period the percentage of PD medicines delayed between 30-59 minutes went from 34% to 15% (ward X), 52% to 9% (ward Y) and 27% to 28% (ward Z)
- The percentage of PD medicines delayed by greater than 60mins fell from 16% to 7% (ward X), 28% to 4% (ward Y), 11% to 10% (ward Z).

Learning points

The key features of this project which contributed to its success were:

- The multidisciplinary nature of the quality improvement team.
- The power of the patient video within the micro-teaching, which seemed to leave a lasting impression on viewers and win 'hearts and minds'.
- The brevity and concise nature of the micro-teaching, and the fact that it was delivered in the workplace, meant that even busy professionals could attend and absorb the content, despite being in the midst of a working day.
- PDMedCalc has also been a key element of the project, but it is important to acknowledge that challenges that were encountered during the development and approvals processes. Navigating the complex governance that surrounds regulation and implementation of medical devices was challenging. It is therefore recommended that early contact with IT and digital safety experts be made to support this process.

With thanks to the Northumbria Parkinson's Quality Improvement (QI) Project team:

- Dr. James Fisher, Consultant Geriatrician
- Amanda Gordon, Practice Development Lead
- Rachel Carter, Director of Patient Safety
- Amber Cruddos, Practice Development Nurse
- Suzanne Herkes, Patient Safety Improvement Facilitator
- Charlotte Scott, Senior Clinical Pharmacist
- Rachel Magee, Speech & Language Therapist
- Elaine Bolam, Speech & Language Therapist
- Michael Hardy, Pharmacy Technician Team Leader (Informatics)
- Dr. Giovanni Di Paolo, Internal Medicine Trainee
- Callum Brown, Improvement Facilitator, Patient Safety and Improvement Team

Further information about the PDMedCalc tool mentioned in this project, can be found here: https://pdmedcalc.co.uk.

Clinical Audit Heroes Awards
part of
Clinical Audit Awareness Week

Patient Safety

One of five categories in the 2024 Clinical Audit Heroes Awards, this category recognises clinical audits and projects that demonstrate evidence of supporting improved patient safety.

The winners of each award were announced at a series of daily Lunch & Learn events, hosted by N-QI-CAN, on each of the award topics during Clinical Audit Awareness Week.

Details of these events (and recordings for those who wish to listen again) – with news of all the winners – can be found on the Clinical Audit Awareness Week webpage.

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