

Physiology students can use Quality Improvement methodology to reduce incidence of falls during stroke rehabilitation

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INTRODUCTION

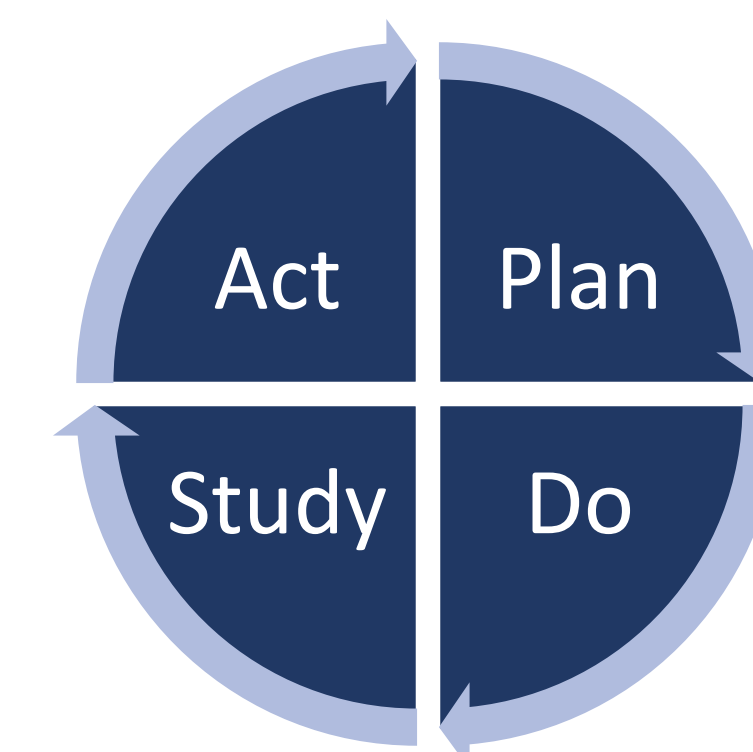
- Falls are a very common, but often preventable problem. One third of individuals aged 65 and older, and half of individuals aged 80 and older will have a fall in any given year (NICE, 2013). Falls can have serious consequences, such as fractures, head injuries and even death.
- Quality improvement (QI) is defined as "the systematic use of methods and tools to try to continuously improve quality of care and outcomes for patients" (Alderwick et al., 2017). QI seeks to make changes within healthcare which contribute to safe, timely, effective, efficient, equitable and person-centred care, the 6 internationally recognised dimensions of healthcare quality (Institute of Medicine, 2001).
- QI is not a single project - interventions continue so that multiple individuals can keep the process going after others have finished their project.
- This study focused on the prevention and management of falls at a small Scottish rehabilitation hospital, using quality improvement methodology by physiology undergraduate students as part of their Honours research project.

AIMS

- Overall aim: To reduce falls within the Stroke Rehab Unit (SRU) by 20% by 2023, in line with national guidance (Scottish Patient Safety Programme).
- By 28th March 2022, 10 staff will have received training in completing Datix forms (NHS Grampian's incident reporting system).
- Of those trained, 90% will report 4 or higher on a scale of 1-5 rating their confidence levels using Datix.

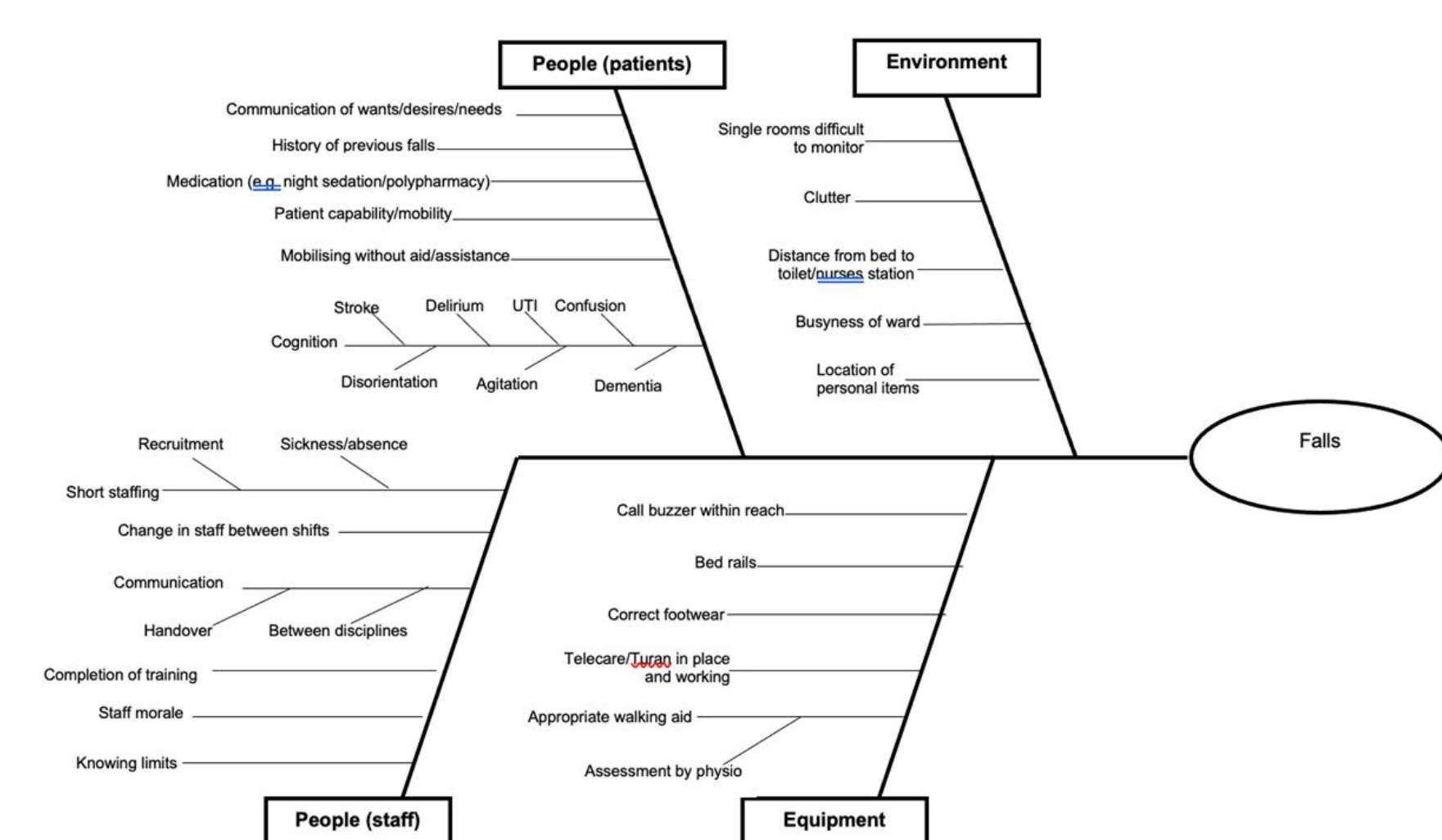
METHODOLOGY

- Data for falls for 2021 was obtained from Datix.
- Survey given out and whiteboard designed for staff to provide thoughts and opinions.
- Attended multidisciplinary team meetings, met with stakeholders and attended handovers in order to gain an understanding of the systems currently in place and the culture surrounding falls.
- Use published Quality Improvement (QI) methodology to identify issues and monitor change (Plan, Do, Study, Act).

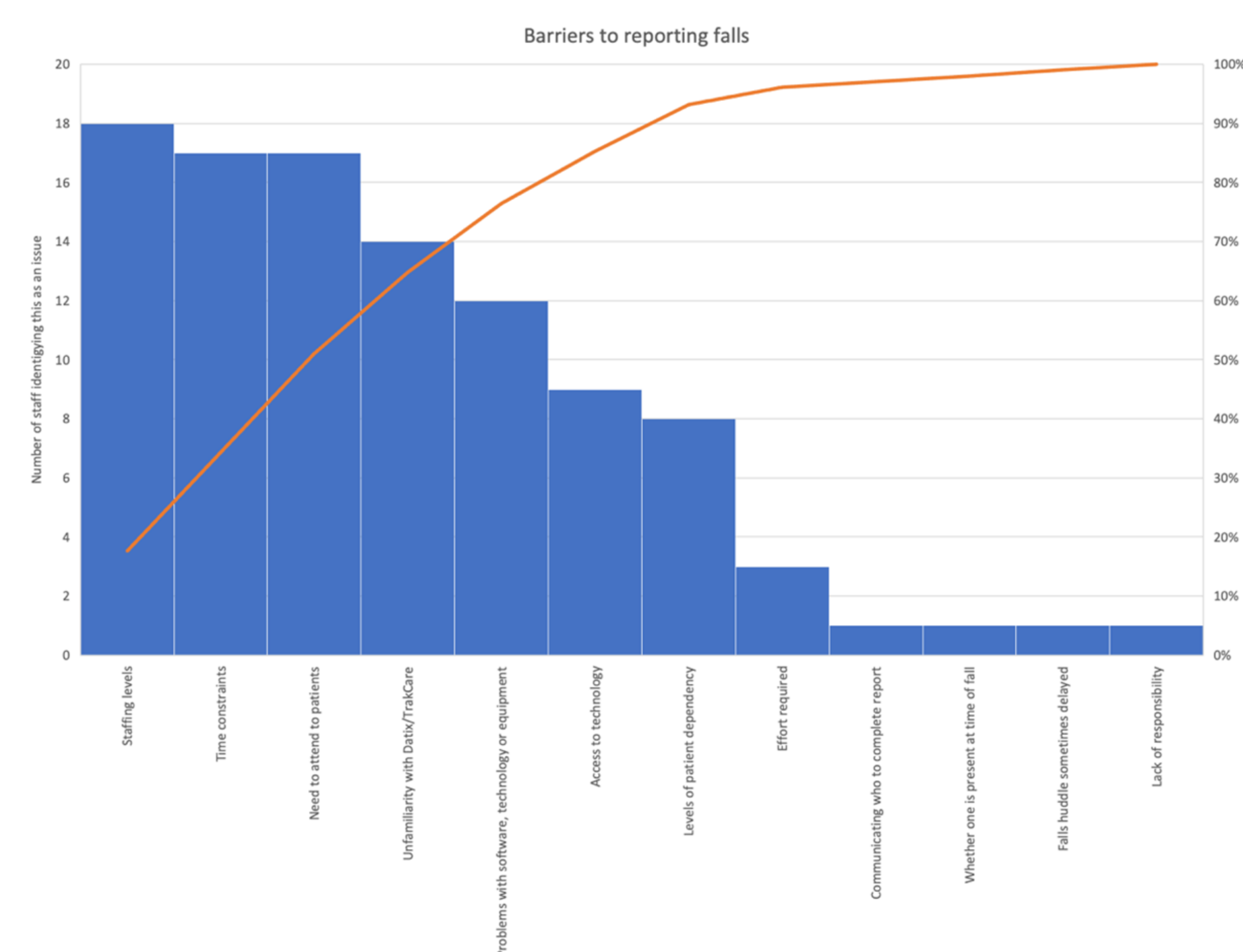


INITIAL RESULTS

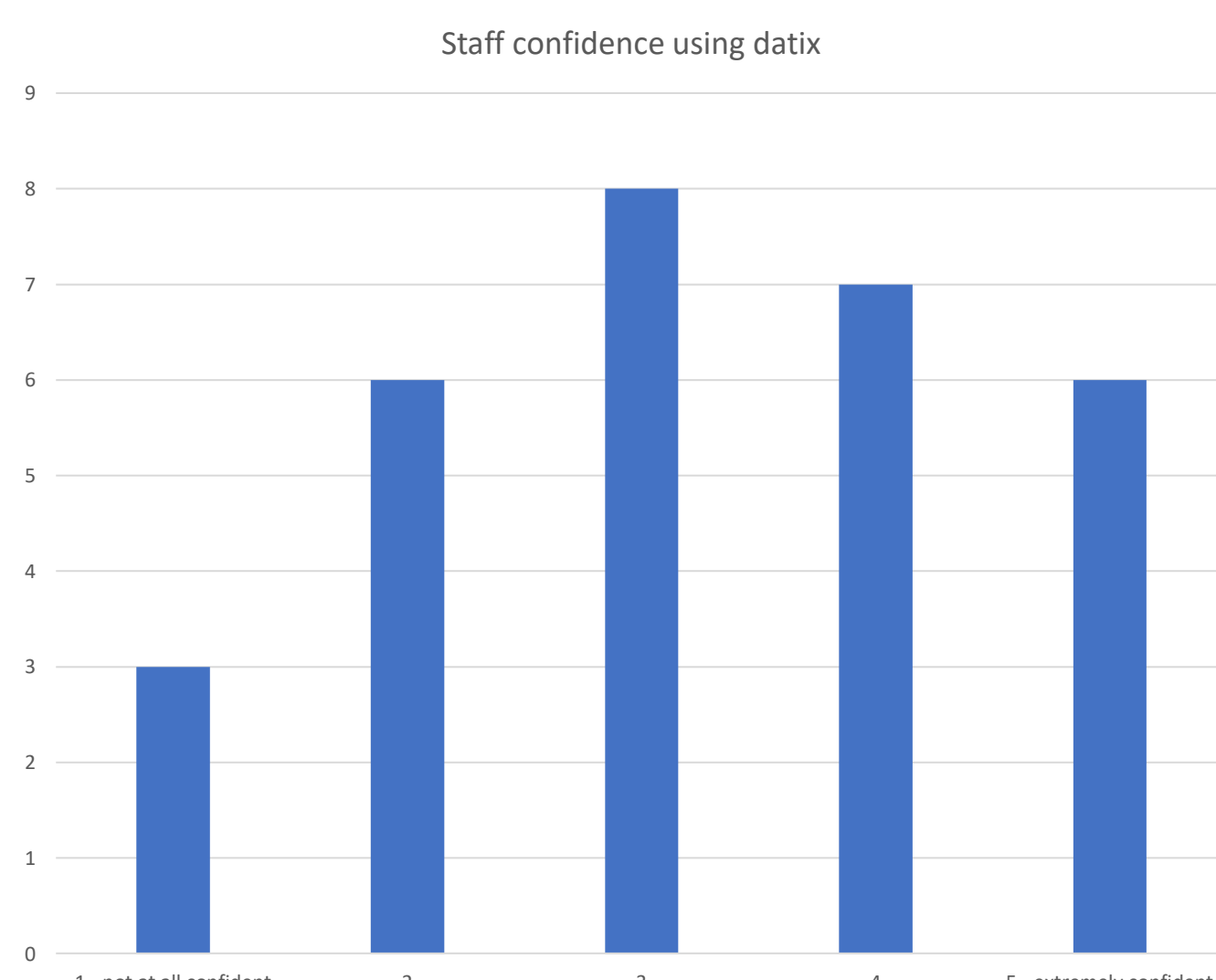
Risk factors for falls identified and mapped



Barriers to reporting falls identified



Levels of staff confidence using Datix are mixed



Staff falls training also identified as an area for improvement



INTERVENTIONS

- Over 10 days, student assisted staff with training on how to report using Datix.
- Student produced improved 'how to' guides on how to use Datix properly/accurately.
- Whiteboard located on the ward used to alert staff to training material and videos on NHS Grampian intranet.
- Used the project budget to provide staff with technology that is set aside for training e.g. tablets so they can undertake online training easily and flexibly during shifts.

POST-INTERVENTION RESULTS

- Only 5 members of staff received training by the target deadline due to staff pressures on the wards during COVID restrictions.
- 80% of those trained reported their confidence level above 4.
- The last two aims were not met by the target date, but the interventions continued, and targets were met by Summer 2022.
- Through training of senior healthcare support workers, cascade training of junior healthcare support workers has been enabled for the future.
- Areas for further improvement work were identified from data collection which will contribute to the aim of reducing falls as the QI work continues.
- Monitoring of fall rate continues until 2023 when effect of QI interventions will be finally analysed,

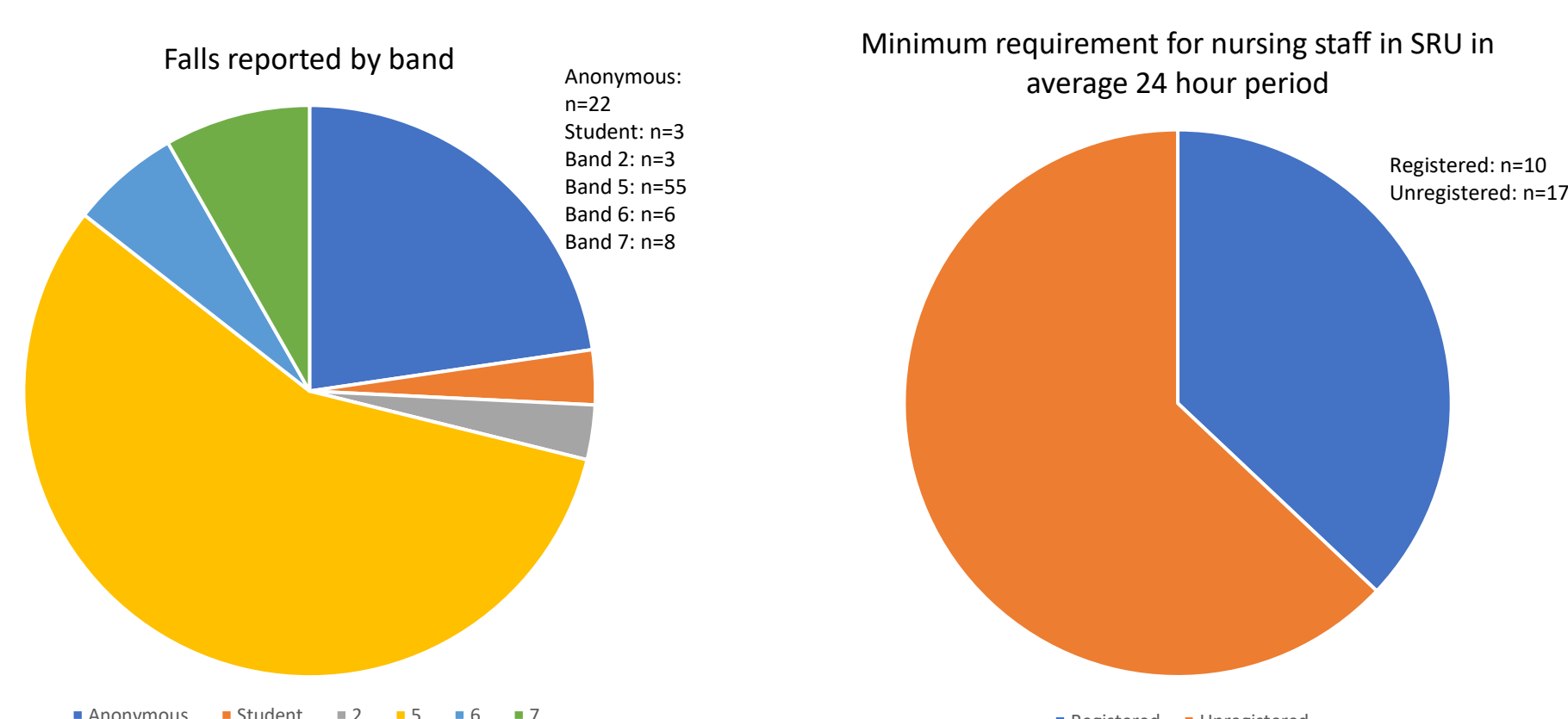
CHALLENGES



DISCUSSION & CONCLUSIONS

- Falls are not a 'quick-fix' issue.
- This project was designed to be a springboard for wider QI surrounding falls within the SRU (and possibly beyond!).
- Many areas identified for improvement; the idea is to take these further with staff participation after this project is completed.
- This project showed that, even during the restrictions caused by the pandemic, physiology undergraduate students can constructively and effectively help deliver positive change within healthcare environments and potentially lead to improved treatment outcomes for patients.

Falls reporting is not representative of staff present on Stroke Rehab Unit



Despite there being more healthcare support workers on the ward, it is mainly the qualified nurses who are reporting falls. Healthcare support workers could be trained or encouraged to report falls more regularly.