Interventions to improve nurses' readiness to Unplanned Electronic Patient Record Downtime

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Introduction

The introduction of Electronic Patient Record (EPR) enhanced the quality and efficiency of healthcare delivery in NHS. Staff training and education is essential to maximise their benefits and mitigate potential drawbacks. The purpose of this quality improvement project was to improve nurses' readiness to manage unplanned Electronic Patient Record (EPR) downtime**.**
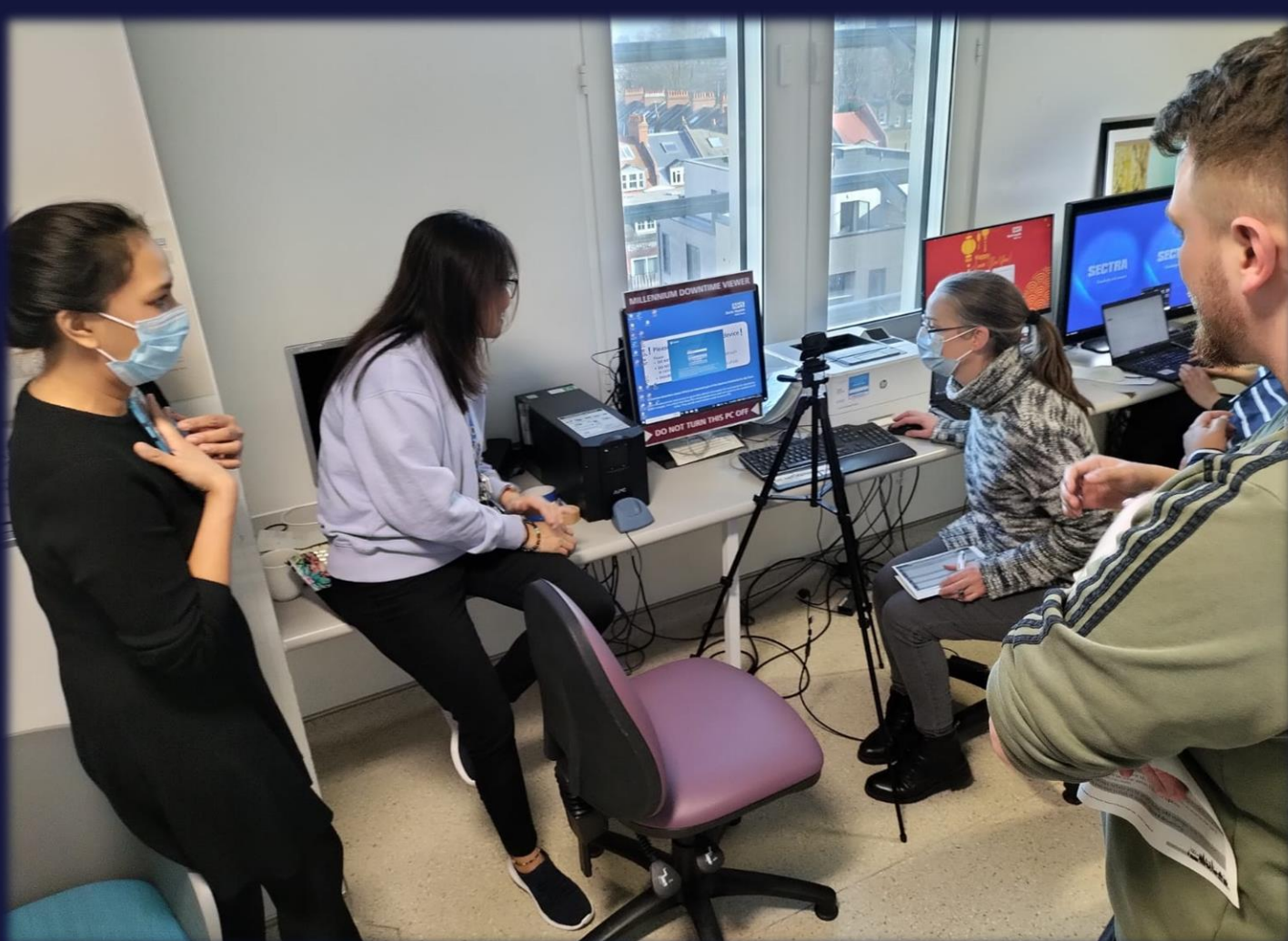
Background

The ability to deliver safe and effective care during EPR downtime is important for business continuity management (NHS England, 2022) and the training on EPR downtime is limited for nursing staff. In October 2022, the hospital had an electrical failure and left the unit without a functional EPR for approximately 24 hours. Despite downtime processes and policies being in place, many of the nurses were not aware of these. They lacked information regarding downtime documentation, paper orders, how to access the Electronic Medication Administrating Record (EMAR), and to perform downtime recovery (Sano and Alexander, 2020). This project was implemented to improve nurses' readiness to manage EPR downtime.

Method

A training course was designed in collaboration with the informatic lead and was implemented during nursing team days over the period of 3 months, which was also opened to the wider multi-disciplinary team members(MDT).The training lasted for 2.5 hours and consisted of a presentation about the effects that EPR downtime have on workflow, patient care and communication between members of staff as well as communication with relatives of patients. Utilising simulation- based education, using downtime equipment and downtime paper documentation allowed the staff to experience downtime viewer functionality. A total of 75 nurses in total undertook downtime training. An evaluation survey was completed post training.

Training

- ➢ Hands on training with downtime equipment
- ➢ Practical demonstration of downtime viewer functionality
- ➢ Tabletop exercise with real scenarios
- ➢ Simulation based education
- ➢ Practice with downtime forms and chain of communication

Results

Training evaluation survey results n-75

Legend: How well prepared, How to access EMAR, How to use backup systems, Chain of communication
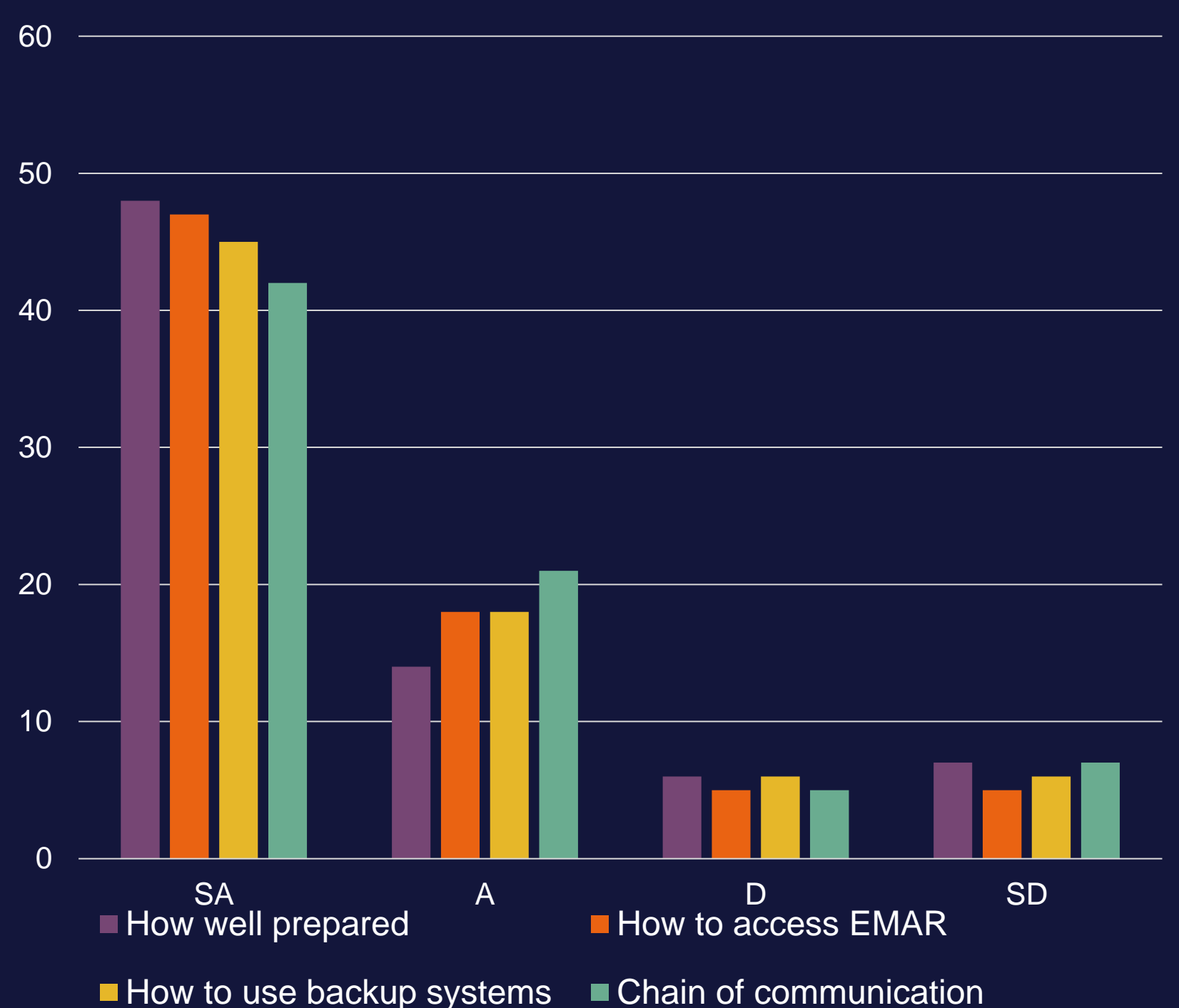
	Mean	Standard deviation
Question 1	1.62	1.40
Question 2	1.57	1.29
Question 3	1.64	1.38
Question 4	1.69	1.44

Conclusion

EPR downtimes can have disastrous effects both on quality of care as well as general operations within an organisation (Coffey et al, 2016). The training course improved the knowledge and confidence of nurses' ability to deal with future unplanned EPR downtime. A continued educational programme around EPR downtime needs to be reviewed and standardised in the trust

References

Coffey,P.S.,Postal, S., Houston,S.M. and Mckeeby, J.W. (2016) Lessons learned from an electronic health record downtime, *Perspectives in Health Information Management*, 1-7
National Health Service England. (2022) *NHS Emergency Preparedness Resilience and Response Framework*, Leeds: National Health Service (Accessed 18 February 2023), Available from https://www.england.nhs.uk/wp-content/uploads/2022/07/B0900_emergency-preparedness-resilience-and-response-framework.pdf
Sano, J.M. and Alexander, S. (2020) Using an Evidence-Based Approach for Electronic Health Record Downtime Education in Nurse Onboarding, *Computers, Informatics, Nursing: CIN*, 38(1), 36-44.