How to solve a problem like a cross-site handover? Utilising technology to overhaul a "red flag" medical handover process

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Aim

Handover aims to achieve the efficient communication of clinical information when responsibility for patients is transferred. The Royal Edinburgh Hospital (REH), a specialist hospital serving the Lothians, has repeatedly received "red flags" (ranked in the bottom 2% of benchmarked areas) on the Scottish Training Survey (STS) (1) and GMC National Training Survey (2) handover section.
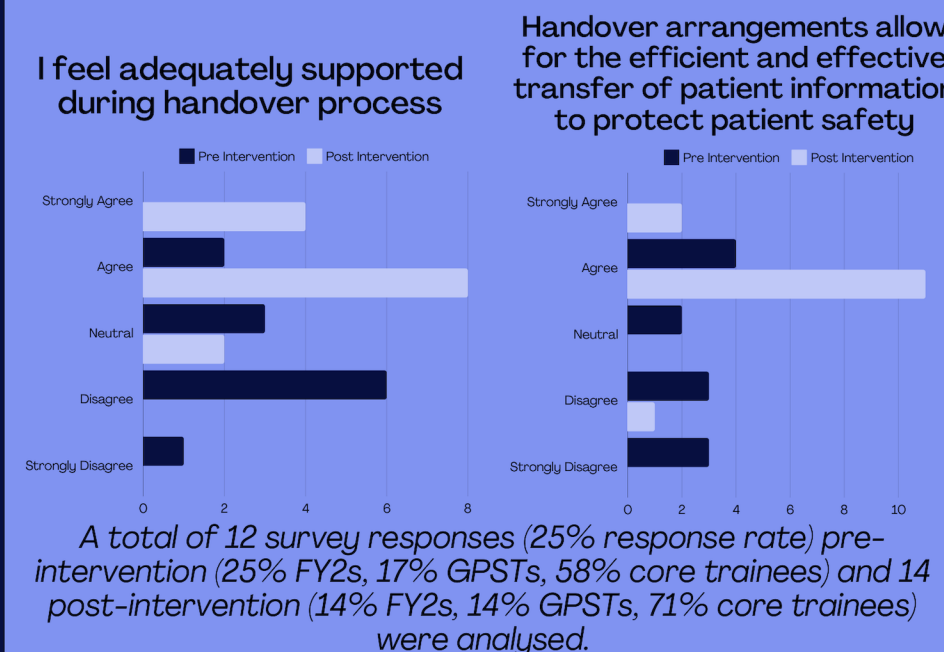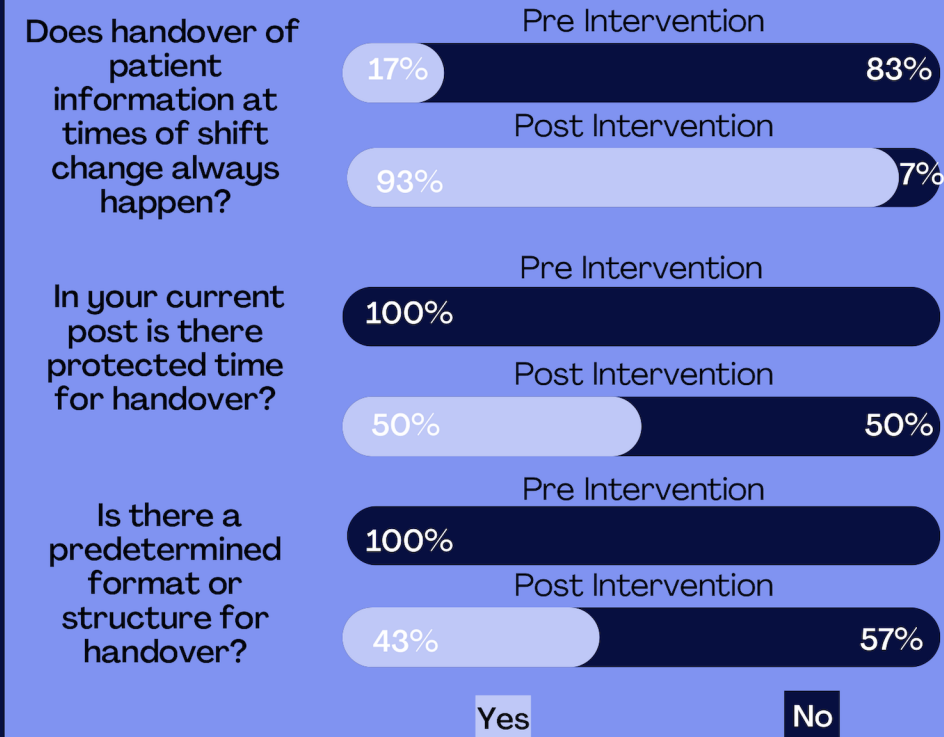
We wanted to change this.

Methods

What we changed:
- Altered shift times to include protected time for handover
- Introduced a dedicated room for handover
- Utilised Microsoft Teams to facilitate the involvement of senior doctors (psychiatry registrar on call) and smaller satellite sites,
- Disseminated the changes to the handover process at all inductions and introduced a new Standard Operating Procedure (SOP).

How we evaluated the changes:
Data from REH Doctors in Training (DiT) were extracted from an anonymised national handover survey disseminated to all psychiatry DiT in January 2023. The survey was repeated in January 2024, after the introduction of the above changes. In addition, data from the STS were analysed.

Results

Does handover of patient information at times of shift change always happen?
- Pre Intervention: 17% / 83%
- Post Intervention: 93% / 7%

In your current post is there protected time for handover?
- Pre Intervention: 100%
- Post Intervention: 50% / 50%

Is there a predetermined format or structure for handover?
- Pre Intervention: 100%
- Post Intervention: 43% / 57%

Yes / No

I feel adequately supported during handover process

Handover arrangements allow for the efficient and effective transfer of patient information to protect patient safety

A total of 12 survey responses (25% response rate) pre-intervention (25% FY2s, 17% GPSTs, 58% core trainees) and 14 post-intervention (14% FY2s, 14% GPSTs, 71% core trainees) were analysed.

Conclusion

The interventions have led to improvements in the consistency, frequency, and format of the medical handover process for the REH. There is now consistent senior involvement in a medical handover process, and improved confidence amongst DiT that the handover process facilitates the safe transfer of patient care, alongside serving as a tool that contributes to the education and training of DiT working within the REH and associated services.

Further work is ongoing to address potential remaining barriers to a safe and efficient handover process. This includes:
- Securing improved video conferencing software for the handover room
- Designing a process for the weekend teams to handover back to weekday teams
- Expansion of the handover to include other members of the MDT, including the Coordinating Charge Nurse (CCN) for the REH and the Mental Health Assessment Services (MHAS)
- Improving the use of handover as an educational opportunity

References

1. Data from Scottish Training Survey 2023 for the Royal Edinburgh Hospital. Available at: https://www.scotlanddeanery.nhs.scot/media/722172/sts-rag-2023-lothian.pdf
2. Data from National training survey reports 2019-2021 for the Royal Edinburgh Hospital. Available at: Oracle Analytics Interactive Dashboards – NTS (gmc-uk.org)