UF | **College of Medicine**
Quality and Patient Safety
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CASE STUDY: ENHANCING PATIENT SAFETY IN NEUROLOGY TRANSFERS THROUGH A COLLABORATIVE, STANDARDIZED HANDOFF TOOL

To address a critical information gap created by a departmental restructuring, our neurology service developed a standardized, clinician-led handoff tool within the Electronic Health Record (EHR). This initiative aimed to bridge the communication divide between the Neurointensive Care Unit (ICU) and the general neurology floor, ensuring safer and more efficient patient transfers.

Quality Improvement Methods

A multidisciplinary team, led by a physician champion and composed of the primary end-users—Advanced Practice Providers (APPs) and neurology residents—was assembled to address the challenge. The team adopted a collaborative, iterative approach to develop and implement a standardized handoff process over several months. This method ensured the final tool was practical, addressed the needs of all stakeholders, and gained widespread buy-in prior to implementation.

Interventions

The team introduced a standardized, bidirectional transfer note built within the EHR. The development and implementation followed an iterative cycle.

- **Problem Identification:** The team held several informal conversations with ICU and neurology clinicians and staff to refine their understanding. The team identified that the new departmental structure, where the general neurology service no longer followed patients in the ICU, created a high risk for miscommunication during patient transfers.

- **Initial Plan:** The group decided that a standardized, written handoff note within the EHR would be a more reliable and accessible solution than verbal-only sign-outs.

- **Collaborative Drafting:** An initial draft of the transfer note was created by the physician champion.

- **Feedback and Refinement:** The draft was presented to resident and APP representatives in a series of meetings. Their feedback on clinical priorities and workflow was used to refine the note, ensuring it captured essential details for both the sending and receiving teams.

- **Tool Development:** The physician champion personally built the finalized note as a "smart phrase" and "smart list" within the EHR, designing it to be easily populated from the daily progress note to maximize efficiency.

- **Securing Buy-In:** The completed tool was formally presented at resident and APP business meetings to explain its function, benefits, and ease of use, securing institutional buy-in.

- **Implementation:** The standardized transfer note was officially rolled out and mandated for all patient transfers between the Neuro ICU and the general neurology service.

Results

While formal quantitative data is pending analysis, the implementation of the standardized transfer note led to significant and immediate qualitative improvements:

- **Communication Improvement:** The tool standardized handoff communication for over 40 clinicians, bridging the knowledge gap and aligning clinical priorities between teams.

- **Adverse Event Reduction:** The service has observed a marked decrease in patients "bouncing back" to the ICU for preventable issues, particularly aspiration events.

- **Sustained Improvement:** The ongoing use of the note has fostered a better culture of documentation and communication, preventing the need for clinicians to "reinvent the wheel" with each new patient.

Incorporating this tool directly into the EHR vastly enhanced the efficacy and efficiency of the handoff process. The physician-led development of the smart phrase and smart list allowed for rapid creation and deployment without relying on formal IT project cycles. This use of embedded EHR functionalities facilitated a more robust and reliable transfer of care, standardized practices, and ensured better communication within the multidisciplinary team.

Key Takeaways

The success of this project offers several important lessons for quality improvement:

- **Clinician-Led Innovation is Powerful:** A motivated clinician can leverage existing EHR tools to develop and implement effective solutions rapidly, overcoming the potential delays of formal IT development cycles.

- **Collaboration Drives Adoption:** Involving frontline end-users (residents and APPs) in the design process was essential for creating a practical tool that gained widespread acceptance and buy-in.

- **Designing for Workflow is Crucial:** Making the tool efficient and easy to integrate into the existing workflow was key to its successful adoption and its positive secondary effect on overall documentation quality.

- **Standardized Written Handoffs Enhance Safety:** A permanent, written record in the EHR ensures that critical handoff information is accessible to the entire care team at any time, increasing reliability and patient safety

Conclusion

The sustained improvement in the patient transfer process achieved through this initiative demonstrates the power of collaborative, clinician-led quality improvement. The standardized transfer note is not only effective in enhancing patient safety and care quality but is also an adaptable model that underscores how leveraging existing EHR technology can provide powerful solutions to pressing clinical challenges.

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