Using Epic Trauma Narrator and Monitor to Improve Teamwork in the Trauma Bay

Rady Children's

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Discussion

Our trauma narrator and Epic monitor project was designed to increase the workflow efficiency, increase team awareness of current status/plan/documentation, decrease time spent charting, and improve the accuracy of data captured for both documentation and billing purposes. We previously were on a paper flowsheet, which went missing or were incomplete more frequently than desired. We went from this flowsheet to an Epic narrator module, which we then designed to flow into a large monitor on the wall with a specific type of "monitor" readout that allowed the entire team to visualize vital sign trends, medications already given, laboratory/radiologic studies ordered, and be able to pull up any results from the visit. Physicians are now able to pull this narrator data into their notes, decreasing their time spent on documentation. Other goals that are still in progress involve an interface of discrete data fields directly into the trauma registry and increased report-writing capabilities.

Process Steps

Planning: Researching other institutions use of the Epic Narrator, literature review, modeling the Epic Narrator after proprietary paper trauma resuscitation flowsheet. Physical hardware layout and education rollout designs.

Development: Epic ASAP and ClinDoc analysts involved in Epic build of Narrator, Epic ASAP analyst involved in Epic Monitor Module build, facilities and IT involved in installation of wall-mounted monitors.

Roll Out: Prior to two week "Go Live" of Epic trauma narrator, all trauma nurses were trained using scenario-based sessions. During "Go Live" there was duplicate charting (paper and electronic) with additional staffing support to ensure no data points were missed, staff were supported, and no educational gaps were identified.

Resources

Approximately 1500 hours of staffing for development:
Six months of FTE (staffing) for 30% project manager, 100% Epic ASAP resource, 25% ClinDoc resource, additional 250 hours of other IT support Additionally, approximately 750 hours of emergency department and trauma personnel time were required for education, rollout, and dual charting during go-live.
Since the monitors had to be mounted, there was special permitting required as well. Additional hardware purchased included two computer-on-wheels units, two workstations to run the Epic monitor module, two 55 inch flat screen monitors with mounting hardware, and the wireless keyboards with trackpads to use with the large monitors.

Figure 1. Pre/Post Clinician Survey.
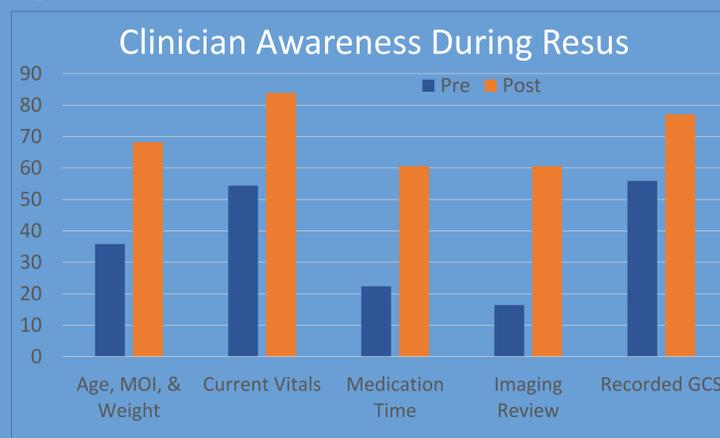
Conclusions

Lessons Learned:
- Treat each phase as own project.
- Reach out to other facilities.
- Have clinical staff involved in design.
- Support your EMR team through the vendor.

Benefits:
- Easy to view monitor increases clinician awareness and teamwork in trauma bay.
- Medication & CPR timers are helpful.
- Ability to view imaging on large screen is helpful.
- Ability to capture data real time from EMR.
- No "lost" trauma flowsheets.

Potential Pitfalls:
- Patient privacy – mind where screens are placed.
- Training to move from paper to electronic documentation and adaptation period.

Contact

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