Pixie Dust and Patient Flow: Sprinkling magic to provide inpatient care to ED boarders

Astrid Sobotka, MSNL, BSN, RN, LSSGB – Sunni Fleming, MADR, BSN, RN, NE-BC, CCRN – BryAnna Gornati, MSOL, BSN, RN

BACKGROUND

Emergency Department (ED) crowding continues to be a nationwide concern, associated with inadequate coordination of care, higher left-without-being-seen (LWBS) rates and higher hospital costs. In 2022, this full-service 72-bed pediatric hospital saw an increase in ED visits and sustained high occupancy rates on the inpatient units. During this time, the Hospital Incident Command System (HICS) structure was activated due to sustained capacity constraints. These circumstances led to increased ED Admit Holds and ED LWBS along with the financial loss of billable hours for observation.

PURPOSE

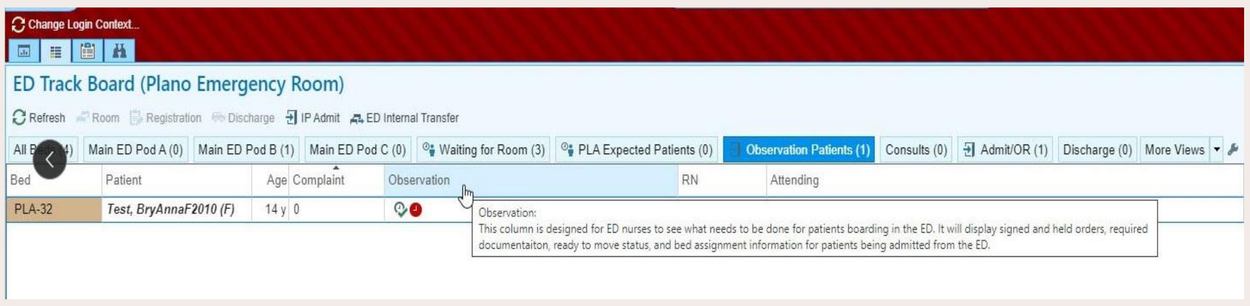
The aim of this project was to create an ED boarder workflow to provide Inpatient care to ED Admit Hold patients, decreased the number of admit holds still under the care of the ED MDs, decrease ED LWBS rates, and increase billable hours for observation.

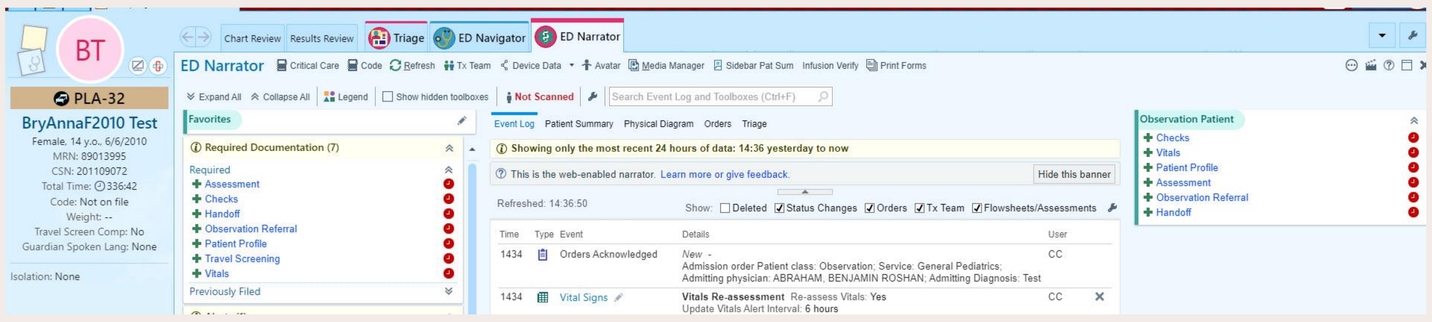
METHODS

- Created a project charter – including stakeholders, team members and project objectives
- Followed Quality Improvement steps including literature review, process maps, and analyzing baseline data.
- Utilized LEAN Six Sigma and PDSA methodologies
- Maximized our internal data analytics to ensure outcome metrics would be available with project launch.
- Conducted PDSA cycles surrounding the Electronic Medical Record (EMR) build, identifying key events and coding.
- Held weekly meetings to discuss current metrics, wins, challenges, and suggestions for change or improvement.

INTERVENTIONS

- Adapted EMR to identify Boarder/Observation patients. This triggers the patient status to update which allows billable hours to begin and opens a toolbox to begin observation documentation process for nursing.
- IS team ensured new EMR build translated daily reports to the operations and finance teams.
- Roles and Responsibility tools and resources were created for staff using a step-by-step approach
- Multiple testing days were completed to ensure all steps worked properly and if unintended consequences were found they could be addressed in real-time
- Education resources created for clinical team members as well as physicians
- Daily metrics were reviewed by the project team for the first two weeks and then weekly and monthly.

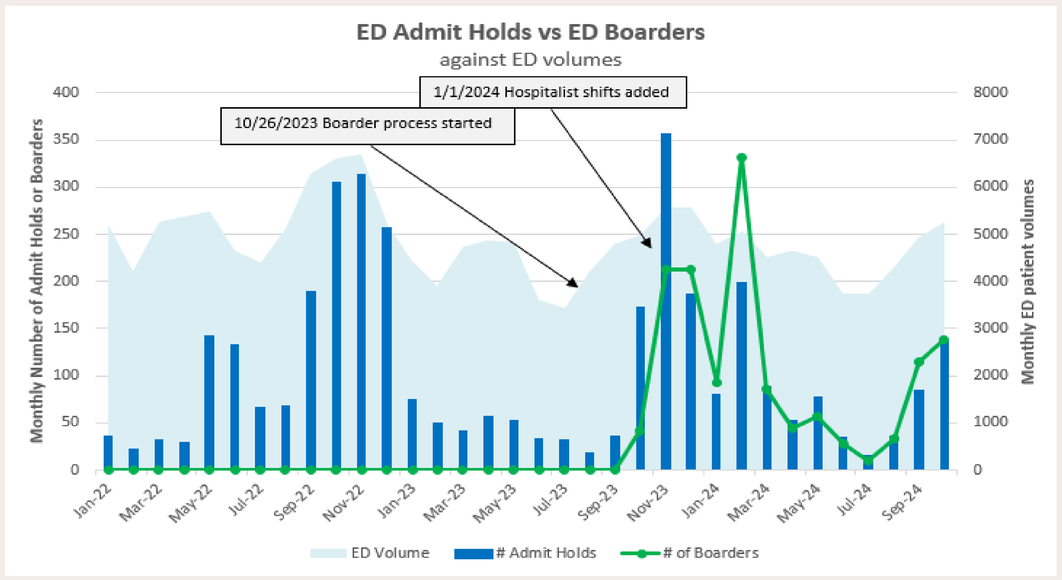


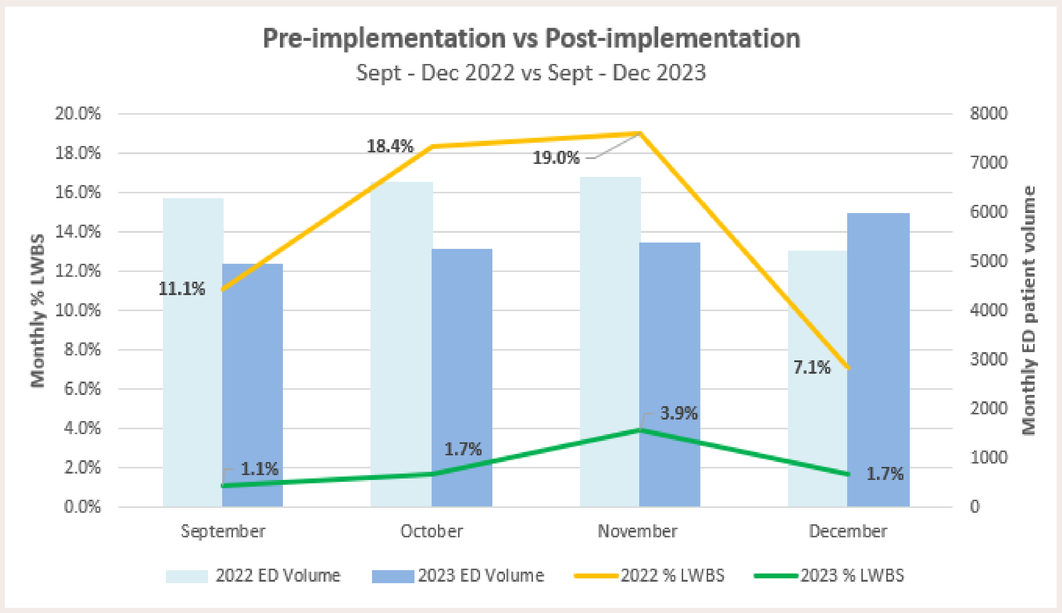


OUTCOMES

The new ED boarder workflow was implemented 10/26/2023. From go-live through 10/2024, the Hospitalist team cared for 1,400 boarders utilizing 10,662 physician hours with an average of 7.6 hours per patient in boarder status. These hours became billable hours for observation. An unexpected positive outcome was 168 patients receiving 2,026 hours of Hospitalist care were discharged home from the ED. LWBS rate for the two months prior averaged 15%. Post-implementation, with ED physicians freed from caring for Admit Holds, LWBS rates decreased to an average of 2.4%.

- **10,662 boarder/observation hours = billable observation hours**
- **LWBS decreased 84% from 2022**
- **Nov-Dec 2022 vs Nov-Dec 2023 LWBS down 79%**
- **168 patients in Boarder status for 2,026 hours were discharged from ED by Hospitalist**





NURSING IMPLICATIONS/DISCUSSION

During PDSA cycles, nurse feedback was instrumental to improving workflow and efficiency. Superusers helped support the larger team during implementation. During implementation, superusers and leaders identified the need for a Boarder Resource Nurse (BRN). The BRN floated between the ED and Inpatient units to assist with nurse/physician questions and helped complete documentation. Bedside nurses provided positive feedback on the EHR tools which allowed quick and seamless charting for boarder patients. Similarly, the Hospitalist group felt the EMR enhancements drove efficiency and thoroughness when accepting boarder patients. ED nurses and physicians expressed decreased stress as they now had more time to care for incoming ED patients.

ED Charge Nurse Responsibilities:

- Ensure bed assignment pager is readily available. Charge RN will attend 0800 meeting with a list of HOLD patients currently in the ED that are likely to dwell for an extended period in the ED (not discharged from ED)
- CRT/ACS RNs will need to be assigned to these patients once the patients are identified as
- hospitalist patients. Pt's assignments need to be to specific CRT/ACS in effort to ensure appropriate documentation.
- Rooms will need to be on hold in the ED manager with patient's name and room number (Doe, J-ACS 22) in the comments.
- Once patient is admitted to ACS or discharged from the ED, the Charge RN releases the ED room hold and ensures the room shows "Dirty" to signal EVS to come clean the room.
- Call for additional resources as need. (Educator support, House Sup, ACS charge etc.)

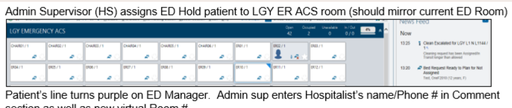
CRT/ACS Nurse Responsibilities:

- Handoff is documented in notes if same RN acting as ED RN and Hospitalist Hold RN.
- ACS RNs and CRT not originally trained in ED will need a tour of department at beginning of first shift. (clean supply room, Omnicell, breakroom, bathrooms etc.)
- ACS/CRT RN needs to inform ED Charge RN when ED Provider and Hospitalist handoff is done.
- ACS/CRT RN will move of ED Manager to LGY ACS ER
- Notifies ED Charge or HUC when Handoff to ACS nurse is complete and pt is leaving department so that Room can be set as "dirty."

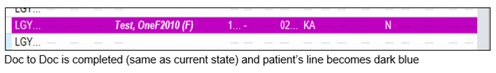
ED HUC Responsibilities:

- Once Provider handoff is complete on ED Holds, ED HUC may assist with moving the pt from LGY ER to LGY ACS ER
- Then ED HUC may assist with placing the room on hold in the ED Manager with Pt information as Hold
- comment
- Once the pt is taken upstairs to ACS floor the ED HUC may assist charge with marking room dirty for EVS.

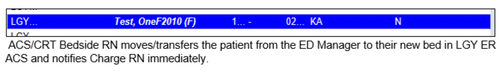
1. Admin Supervisor (HS) assigns ED Hold patient to LGY ER ACS room (should mirror current ED Room)



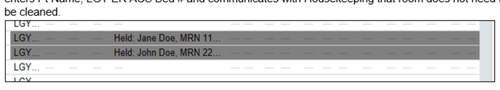
2. Patient's line turns purple on ED Manager. Admin sup enters Hospitalist's name/Phone # in Comment section as well as new virtual Room #



3. Doc to Doc is completed (same as current state) and patient's line becomes dark blue



4. ACS/CRT Bedside RN moves/transfers the patient from the ED Manager to their new bed in LGY ER ACS and notifies Charge RN immediately.
5. Charge RN or HUC then immediately places the ED Manager bed on hold – in the comments section enters Pt Name, LGY ER ACS Bed # and communicates with Housekeeping that room does not need to be cleaned.



6. CRT/ACS nurses need to sign up for patients and chart on patients just like they would in an inpatient setting.

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References

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