Vital Signs Documentation Quality Improvement Project

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Project Initiation & Current State Analysis

Background

Delays in vital sign documentation can contribute to safety events, including late recognition of patient deterioration, interruptions in care, and missed or delayed interventions. These delays also affect Epic's clinical decision support.

- **Back charting**: Vital signs are measured but documented later.
- **Batch charting**: Vital signs are entered in groups for a past time range rather than at the time of measurement.

Both practices create gaps in real-time documentation, limiting the team's ability to respond. The Phillips Monitor device, which allows nurses to pull vital signs remotely, can contribute to this issue.

SMART Aim Statement

By the end of FY26, the Nursing Quality and Safety Council will implement a Vital Sign Documentation timeliness improvement project through use of the Lurie Children's Quality Improvement Framework.

Goal: 95% of all Inpatient and Emergency Department nurses to be educated on real-time documentation standards to increase prompt entry of vital signs.

Aim: This project will improve real time documentation by 5% in the ED and in the inpatient units (acute care and ICUs) by 5%.

Project Scope

This project includes the Emergency Department (ED) and all acute and critical care units at the Children's Hospital of Chicago Medical Center.

Current State Analysis

The project team applied the Lurie Children's Quality Improvement (QI) Framework to assess barriers , create a Fishbone diagram, preform and critically appraise literature, and engage stakeholders. This structured process has clarified the root causes and positioned the project for targeted interventions and sustainable improvement.

Measurement

Education					
Type	**Measure**	**Baseline**	**Target**	**Result**	**Source**
Education	Workday Education Completion	0%	95%	97.3%	Workday
Education	Presentations to frontline staff	0 meetings	15	30	Attendance Excel

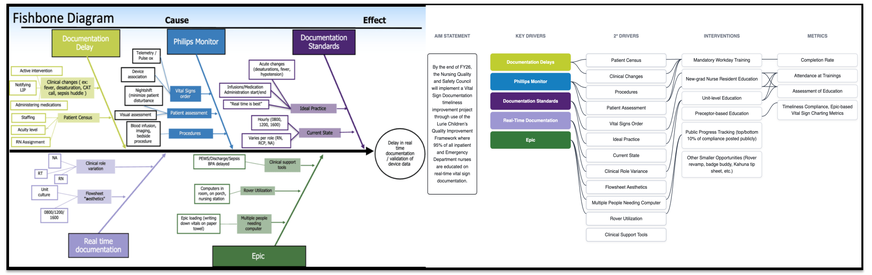
Share of vital signs charted more than 60 minutes after observation *(ED, more than 15 minutes)*								
Type & Time / Unit	**LC ED**	**LC 17**	**LC 19**	**LC 20**	**LC 21**	**LC 22**	**LC NICU**	**LC PICU**
Monitor-pulled, Pre[1]	31.7%	25.0%	26.9%	31.1%	17.0%	21.9%	22.1%	17.5%
Monitor-pulled, Post[2]	18.5%	20.4%	16.9%	18.7%	12.8%	15.9%	19.4%	12.4%
Manually-pulled, Pre	6.3%	5.1%	16.5%	10.3%	7.8%	27.7%	16.7%	14.3%
Manually-pulled, Post	1.7%	3.1%	9.7%	3.8%	4.2%	13.1%	11.4%	10.0%

[1]Pre data week of January 22-28, 2024 | [2]Post data month of January 2026

Future State Design

Intervention Conception

Project leaders first identified an issue with the lack of clear expectations for nurses regarding documentation practices across the hospital, generating a desire to improve real time vital-sign documentation. We then undertook a barriers assessment to understand what was driving the lower-than-preferred rate of real-time charting.



Testing and Implementation

To address delays in vital sign documentation, we are implementing a series of targeted interventions aimed at education and workflow support. Interventions followed the Plan-Do-Study-Act (PDSA) Model.

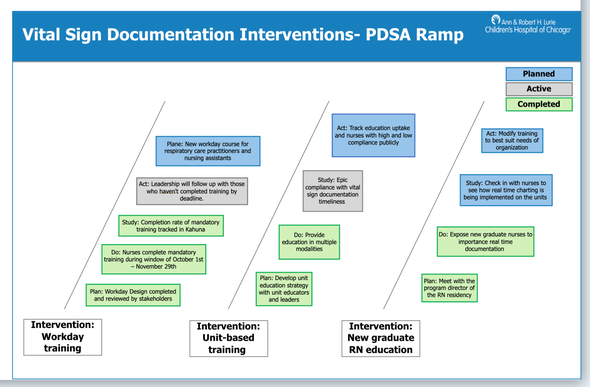
Education & Training

- Mandatory Workday training → clear expectations
- Residency program → early exposure for new-graduate RNs
- Preceptor training → alignment with expectations and best practices
- Targeted education sessions for experienced RNs
- Simulation training for skill reinforcement
- Rounding with Risk Management Team and NQSC members

Workflow Support

- Unit-level "kick-off" → formal launch & ongoing engagement with education
- Tip sheets in Kahuna → ongoing reference
- Badge buddies → quick visual reminders of do's and don'ts of vital sign documentation
- Rover revamp → Live and recorded Rover training, Optional Workday refreshers, and clinical user guide highlighted

Interventions >>>



Conclusions

Work on this initiative is still ongoing, but as we dig deeper several points stand out to us.

- The Phillips Monitor increases the risk of delayed documentation of vital signs
- Prior to intervention, no formal education or training on prompt vital sign documentation had been provided to staff, suggesting a lack of awareness and standardization in practice. Our work will hopefully correct this gap long-term, and has already made significant improvements in the short-term.
- While education was our first focus, sustained improvement requires transparent performance reporting to address variable nurse behaviors and continue the drive towards zero delayed documentation.
- Overall, across all units, both manual and monitor-assisted documentation timeliness saw an improvement

Next Steps

We are firmly in the data monitoring and PDSA cycle review phase of this project. We are including the nursing assistant and Respiratory care practitioner groups to build upon our first PDSA cycle.

Lessons Learned So Far

- Easy-to-adopt nature of this practice change has meant broad, consistent improvement across all units in-scope is easier to achieve
- Standardized education for documentation was a gap at our institution, and closing this gap has results in a sharp improvement; we should look for other similar gaps to close!

Scan for References

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