Improving documentation of Pediatric Early Warning Score (PEWS) in the Electronic Health Record (EHR)

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Children who deteriorate quickly or unexpectedly share similar features up to 24 hours before the event, which can serve as "track and trigger tools"

- Pediatric Early Warning Score (PEWS) can be used to quickly identify and respond to patients at risk
- At ECU Health → lack of timely documentation of PEWS despite auto-calculation of scores by EHR → leading to a lack of clear communication with pediatric providers

**Study Aim:** Increase compliance with documentation of all elements of PEWS in the EHR for patients aged 2-24 months admitted to the pediatric hospitalist team by 20% in 6 months.
Methods

- 197-bed pediatric hospital, tertiary medical center, patients aged 2-24 months
- 5 month Pre Intervention, 6 month Intervention → 15 patients/month chart review
- Multidisciplinary Team: 2 pediatric hospitalist physicians, 1 medical student, nursing staff, resident and attending physicians, IT specialists

Primary Outcome Measure: ↑ % of patients with PEWS generation with vital signs

Process Measures: % of peripheral vascular assessments per shift + reassessment with elevated PEWS, and provider communication

Balancing Measures: rate of transfer to PICU, number of code blue calls to pediatric floor
Results

PDSA 1:
EHR Data Extraction

PDSA 2:
PEWS Education & Care Algorithm

PDSA 3:
Care Badge Card & Station Reminders

PDSA 4:
Nurse Onboarding & 1-on-1 education
Results

PDSA 1: EHR Data Extraction
PDSA 2: PEWS Education & Care Algorithm
PDSA 3: Care Badge Card & Station Reminders
PDSA 4: Nurse Onboarding & 1-on-1 education
Conclusion

Our project highlighted the improvement of PEWS documentation after implementation of PEWS education for nursing staff and providers, along with routine reminders and assessment of barriers to compliance.

Future Directions:

- Continued sustainability through bi-monthly nursing staff meetings → assessing barriers
- Consistent nurse-provider communication for elevated PEWS scores
- Assessment of Balancing Measures (PICU transfers, code blue calls)
- Post Implementation Data