Improving Documentation of Pediatric Early Warning Scale (PEWS) in the Electronic Health Record (EHR)
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BACKGROUND
- Children who deteriorate quickly or unexpectedly in hospital settings share similar features up to 24 hours before the event, which can serve as “track and trigger tools”
- PEWS can be used to quickly identify and respond to patients who may be at risk of deterioration
- At ECU Health → lack of timely documentation of PEWS despite auto-calculation of scores by EHR → lack of clear communication with pediatric providers

PROJECT AIM
To improve documentation of PEWS in the EHR for patients 2-24 months old admitted to the inpatient pediatric unit at ECU Health Medical Center by 20% within 6 months.

PROJECT DESIGN
- ECU Health Medical Center houses a 197-bed pediatric hospital at a tertiary medical center with approximately 7,000 admissions yearly
- A multidisciplinary team was created including: 2 pediatric hospitalist physicians, 1 medical student, nursing staff, resident and attending physicians, IT specialists
- Prior to intervention, 15 random medical charts per month of patients were reviewed → 4 PDSA cycles were conducted, with data reviewed for 15 patients each month.

OUTCOME MEASURES
- 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

LESSONS LEARNED
- Successful improvement of timely documentation of PEWS in the EHR hinged on providing education to all staff and providers, along with routine reminders and assessment of barriers to compliance
- Limitations included high turnover of nursing staff and rotating nursing students who were unaware of the protocol
- To ensure ongoing compliance with the documentation, we will be working closely with our PEWS nurse champions to conduct routine reminders and audits

NEXT STEPS
- 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)
- Continued Post Implementation Data

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