

The Turning Point: Improving Patient Repositioning Practices in the Cardiac Intensive Care Unit



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Background

- Pressure injuries (PIs) can inflict significant discomfort and scarring to patients, impacting satisfaction ratings
- Pediatric statistics show 27% of patients in an Intensive Care Unit will develop a PI
- Pediatric PIs contribute to increased cost: \$20,000 per Stage 3 & Stage 4 injuries
- PIs can prolong hospital stays
- PI Prevention Bundle compliance shows gaps, especially with patient repositioning every 2 hours

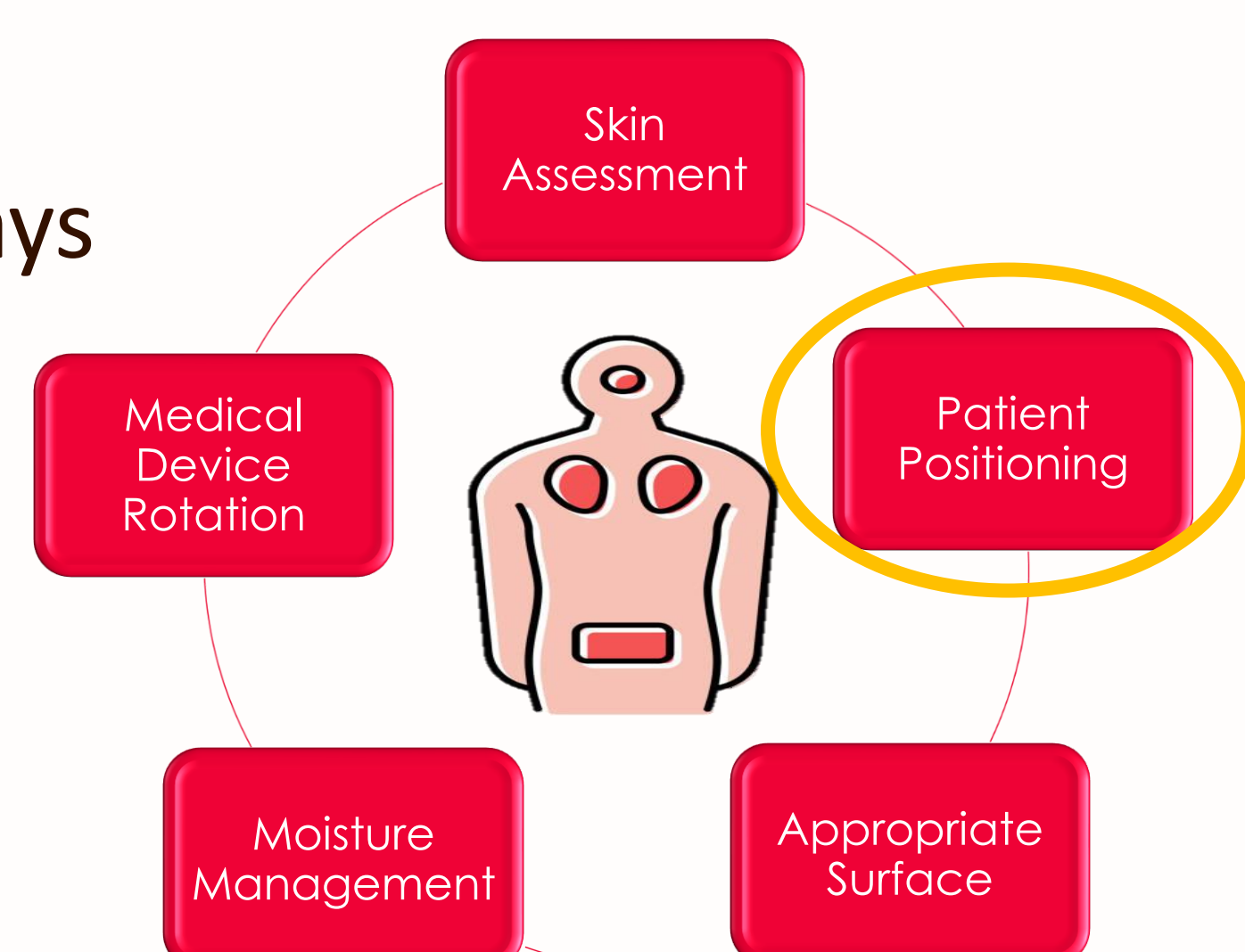


Figure 1: Pressure Injury Prevention Bundle highlighting at risk pressure areas

Problem Analysis

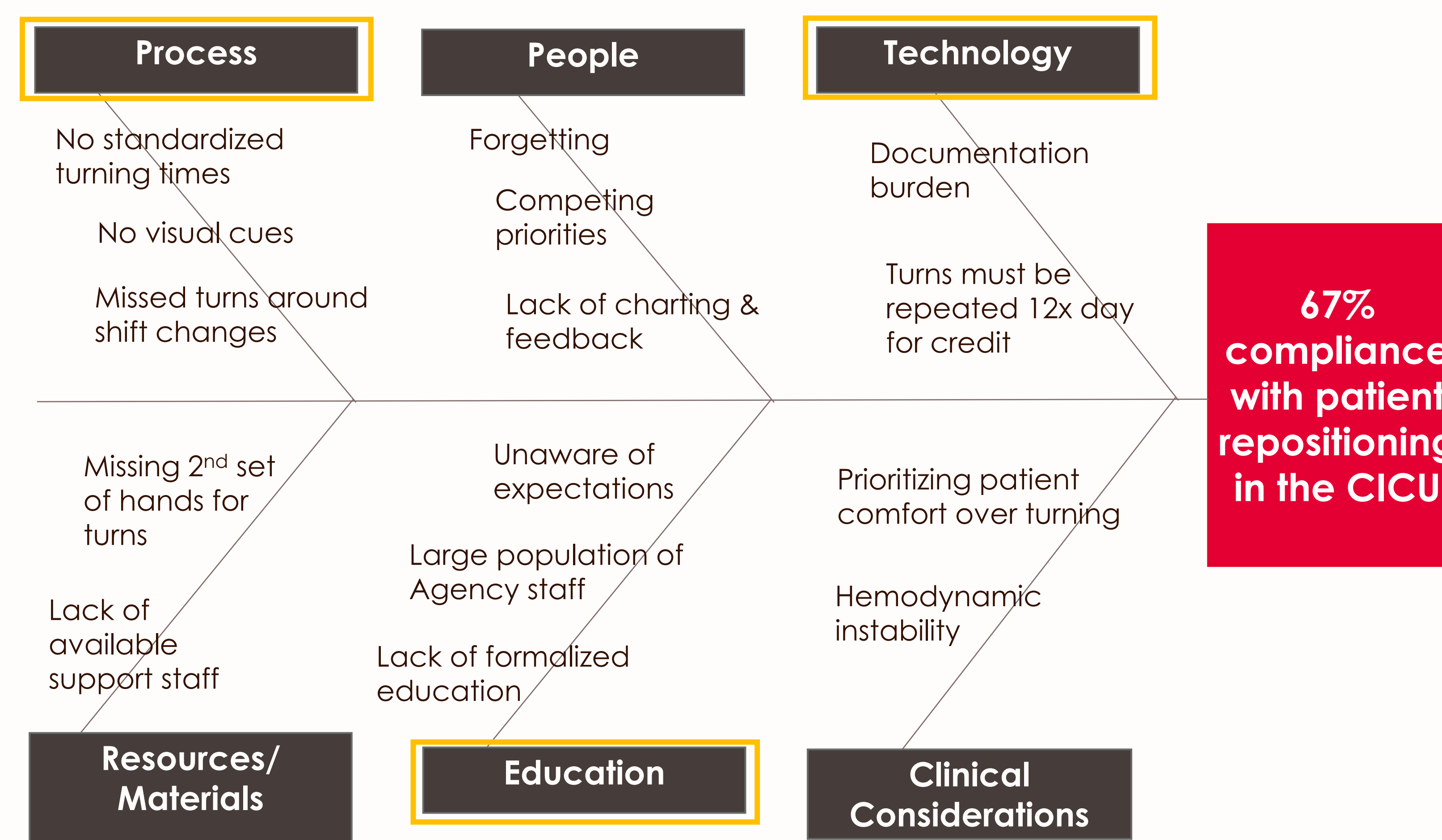


Figure 2: Fishbone Diagram showing compliance challenges

Results

After implementing QI patient repositioning interventions in the CICU, results showed a:

- 54%** Decrease in CICU HAPI rates following the intervention (2023 Q1-3 average of 6.95% to 2023 Q4 rate of 3.32%)
- 33%** Improvement in repositioning compliance in the CICU (67% to 89%)
- 19%** Overall improvement in CICU PI Bundle Compliance (all elements)

Problem

- PI rates increased by 25% within the organization since the start of COVID-19.
- Cardiac Intensive Care Unit (CICU) patients face higher PIs risk due to limited mobility, compromised perfusion, and reliance on life-sustaining medical devices/equipment.
- After the house-wide "Capturing the Credit" QI initiative (Jan. 2022 – Jan. 23) aimed at improving PI Bundle compliance, CICU's patient positioning compliance was only 67%.

SMART Aim

Increase compliance with every 2-hour patient repositioning in at-risk patients admitted to the CICU from 67% to 90% by January 1, 2024, and sustain for 6 months

Key Driver Diagram

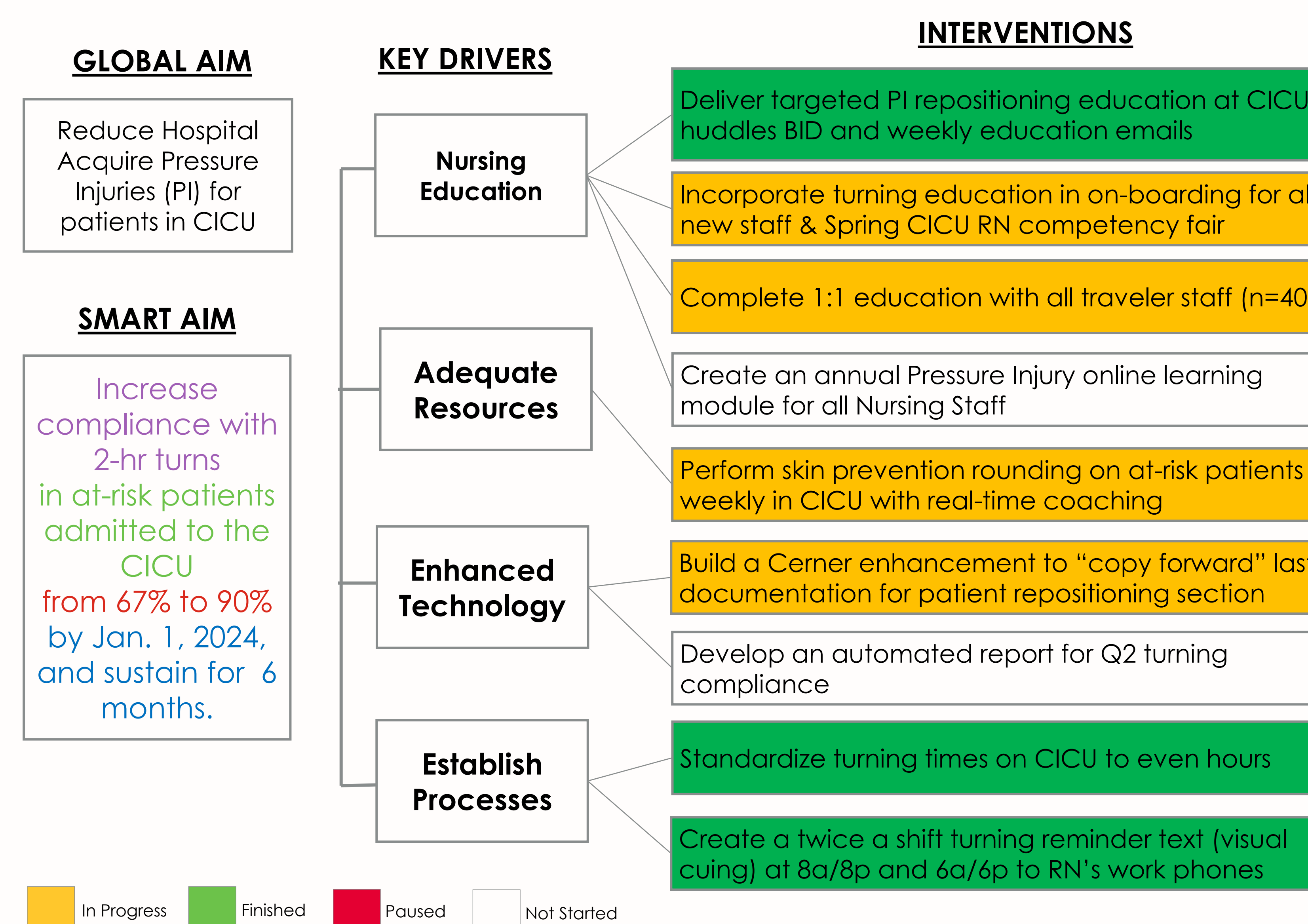


Figure 3: Key Drivers and associated interventions from Sept 2023-Jan. 2024

Discussion

- These results suggest that the combination of standardized turning practices, targeted education, and visual cues effectively enhanced compliance
- While a 90% compliance rate was not reached in the CICU, a gradual improvement was observed
- High numbers of agency & newly onboarding staff suggests education on PI prevention and documentation on a frequent basis is needed
- Additional time is required to determine whether a sustained impact on PI rates is evident in the CICU

Methods

- PI Bundle Compliance data was collected from monthly Prevalence days from Jan. 2022 – Aug. 24
- Patient positioning scored compliant if interventions were charted every 2 hours (Q2) for 24-hours
- Oct 2024- key stakeholders from the CICU and ECMO teams met to launch this new QI initiative
- Oct 2024- problem analysis initiated and key driver diagram created
- A medical record review of at-risk patients was performed post-interventions to assess compliance

Results p-Chart

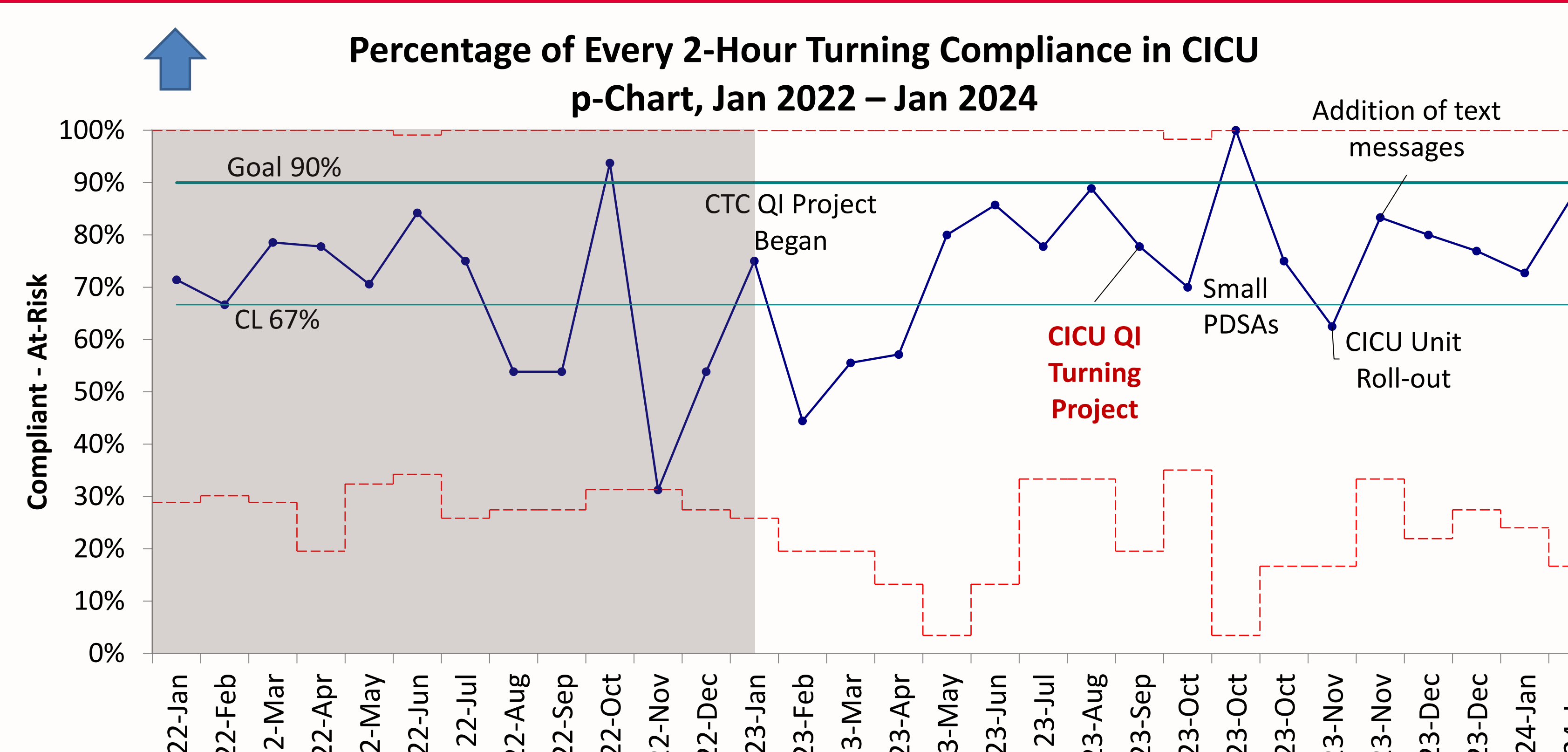


Figure 4: p-Chart showing improvement following interventions

Next Steps

- Continue PI prevention rounding in CICU
- Post turning clocks to bedspaces in CICU
- Embed turning education in Spring competency fair
- Enhancement medical record documentation for positioning to alleviate nursing workflow
- Create wide education for PI prevention
- Custom reporting for PI bundle compliance
- Spread to other hospital areas
- Monitor CICU HAPI rates to assess sustainability