

Stayin' Alive: Establishing a Rhythm With Resuscitation Data

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Background

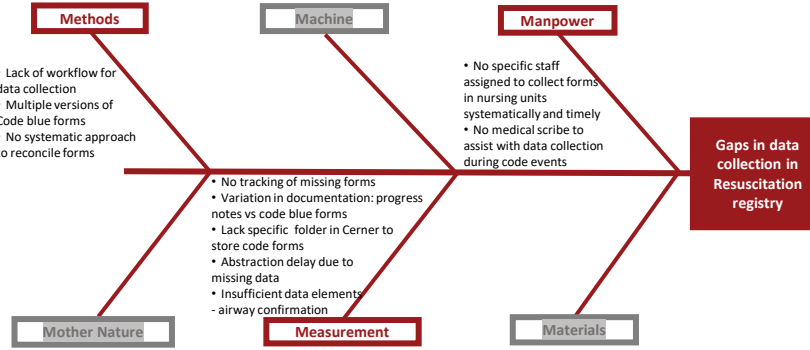
- Goal of participation in the American Heart Association's Get With the Guidelines (GWTG) – Resuscitation program was to ensure high-quality care during inpatient cardiopulmonary arrests (CPA)
- Recognition of excellence required >85% compliance for all measures
- Keck Hospital lost award status several years prior to the establishment of the interprofessional Resuscitation Quality team

Objectives

- Improve workflow of data collection
- Standardize documentation
- Increase compliance with the GWTG measures
- Four data-driven measures included:
 - Time to first shock \leq 2 minute for VF or pulseless VT,
 - Confirmation of airway device placement in the trachea,
 - Time to IV/IO epinephrine \leq 5 minutes for asystole or PEA, and
 - Percent of pulseless cardiac events monitored or witnessed

Methods

- Data reported quarterly to Resuscitation Committee and Critical Care Committee chaired by CNS and Physician Champion
- CNS implemented evidence-based practices: educating ICU staff and assigning Code Blue roles, monthly mock codes, and weekly reviews of CPA forms communicating potential missed opportunities to clinicians



- A Value Stream Map (Figure 1) and Ishikawa Diagram (Figure 2) revealed gaps in data collection
- Quality and Health Information Management developed systematic methods to obtain and analyze data
- CNS and Physician Champion decreased documentation variations

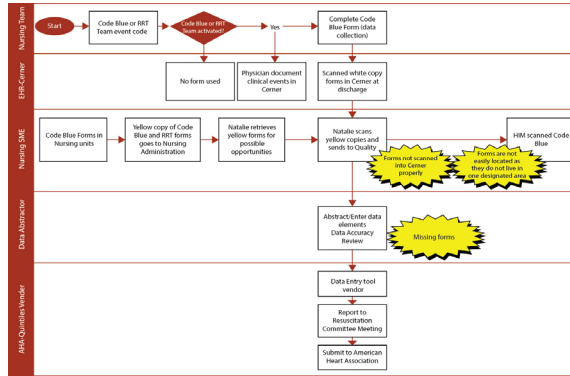


Figure 1

Figure 2

Results

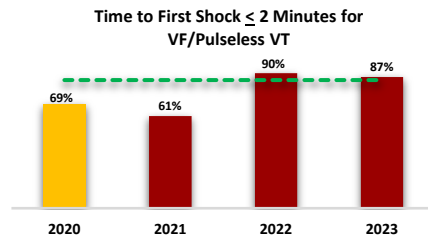


Figure 3

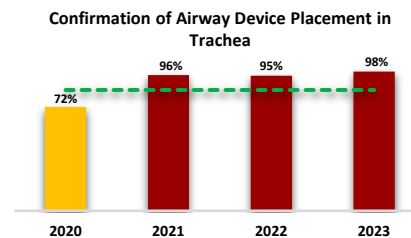


Figure 4

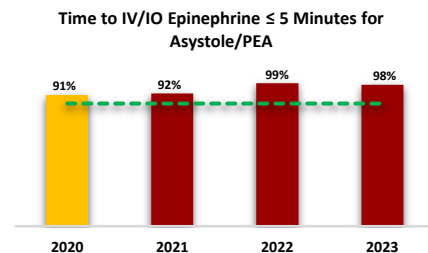


Figure 5

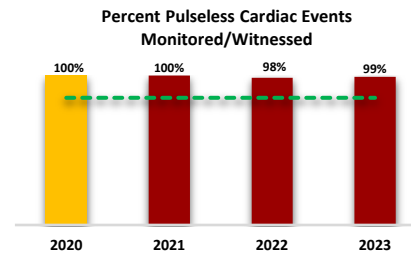
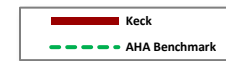


Figure 6



Discussion

- Application of Lean Six Sigma methodology facilitated in identifying limitations
- Utilization of nationally recognized evidenced-based quality measures provided optimal guidance
- Collaboration of an interprofessional team established institutional-wide awareness

Key Takeaways

- Engagement of healthcare professionals across the spectrum resulted in sustained adherence to evidence-based practices
- Collective actions of the interprofessional team ensured patients received the highest quality of resuscitative care



- Substantial progress most evident in time to first shock (Figure 3) and confirmation of airway (Figure 4) measures
- Sustained excellence in time to IV/IO epinephrine (Figure 5) and events monitored or witnessed (Figure 6) measures
- Recipients of the Gold Award by accomplishing >85% compliance for all four measures for two consecutive years (2022 & 2023)