

Impact of Emergency Care Center Specialized Immediate Management Nurse on Quality Metrics

Jo Zarnegar, MSN, RN, CEN, CNML

Background

- Local urban hospital data showed the potential for improved outcomes for stroke, myocardial infarctions, and possible sepsis patient presenting to emergency care center (ECC).
- There is limited data on how the role of the ECC Specialized Immediate Management (SIMS) RN may impact quality metrics, especially in terms of efficiency.
- The SIMS RN goal was to exclusively focus support for time sensitive care to those patients presenting with neurological complaints or deficits, possible myocardial infarctions, and those presenting with possible sepsis with known suspected source in the ECC.

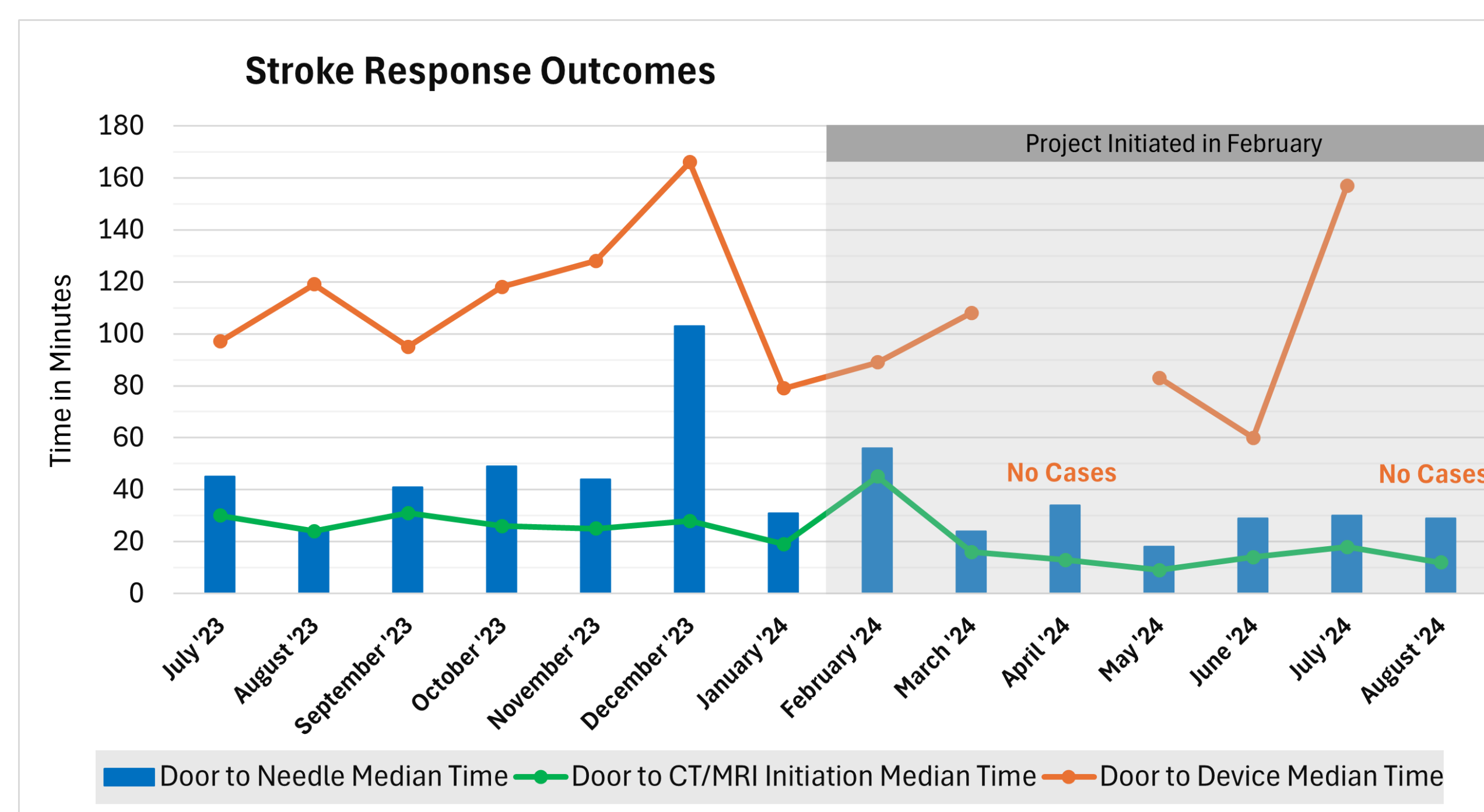
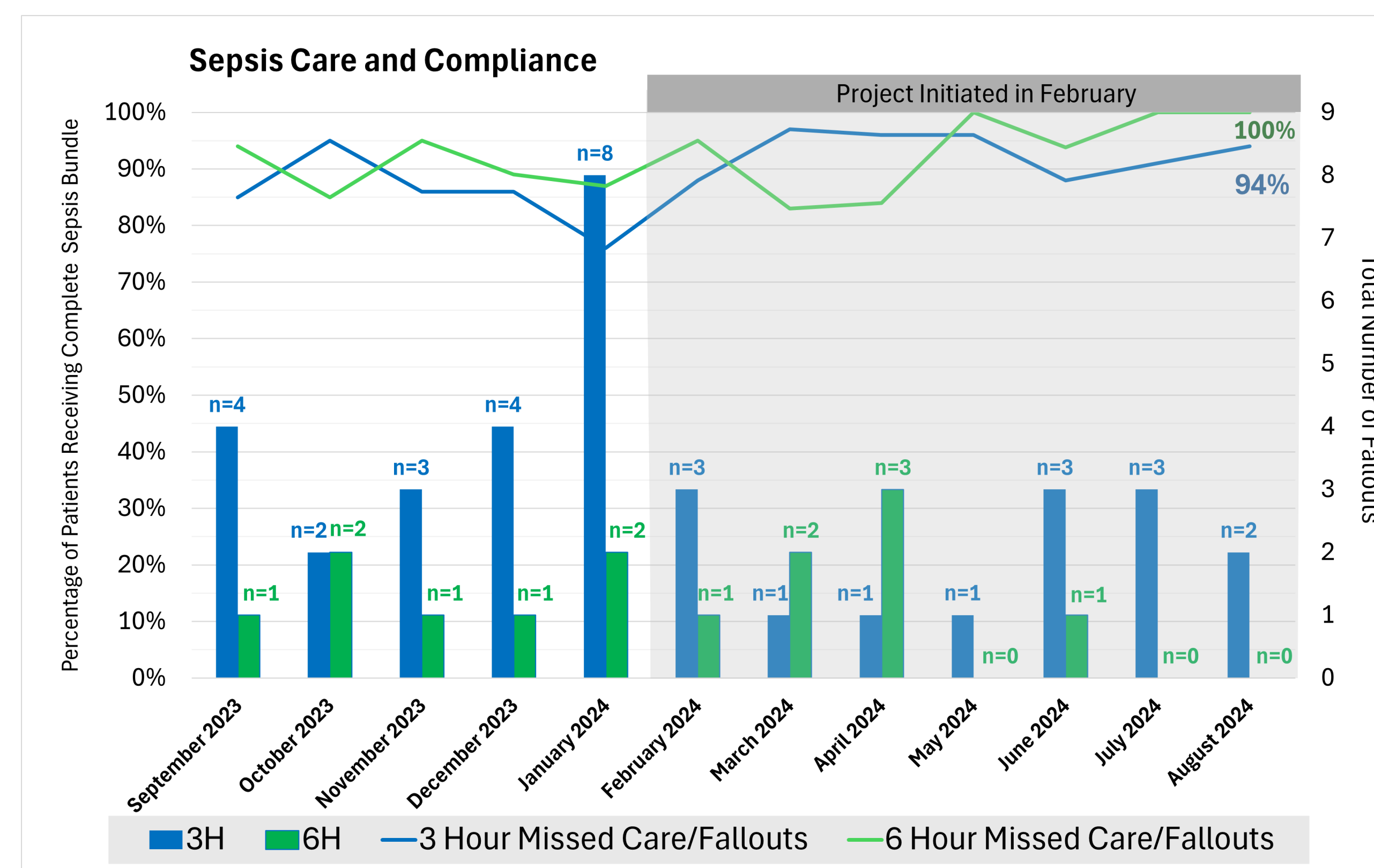
Purpose

- To determine the impact of the SIMS nurse role on stroke, sepsis, and ST-elevation myocardial infarction (STEMI) outcomes and reported quality metrics for patients diagnosed with stroke, sepsis, and STEMI in the Emergency Care Center.

References
available upon
request. Contact
josephine.zarnegar@stjoe.org

Methods

- A quality-improvement project to develop and implement SIMS role for the ECC.
- SIMS project was to run for 6 months, starting Feb.5, 2024. Data was to be compared six months prior from July 2023 to August 2024.
- SIMS RN hours of coverage: 1200-0030 daily.
- Setting: ECC with over 90,000 annual visits.
- Educational day was set aside with respective specialty coordinators to present pertinent education, expectations, and specific data reporting metrics.



Results

Stroke outcomes in minutes (min):

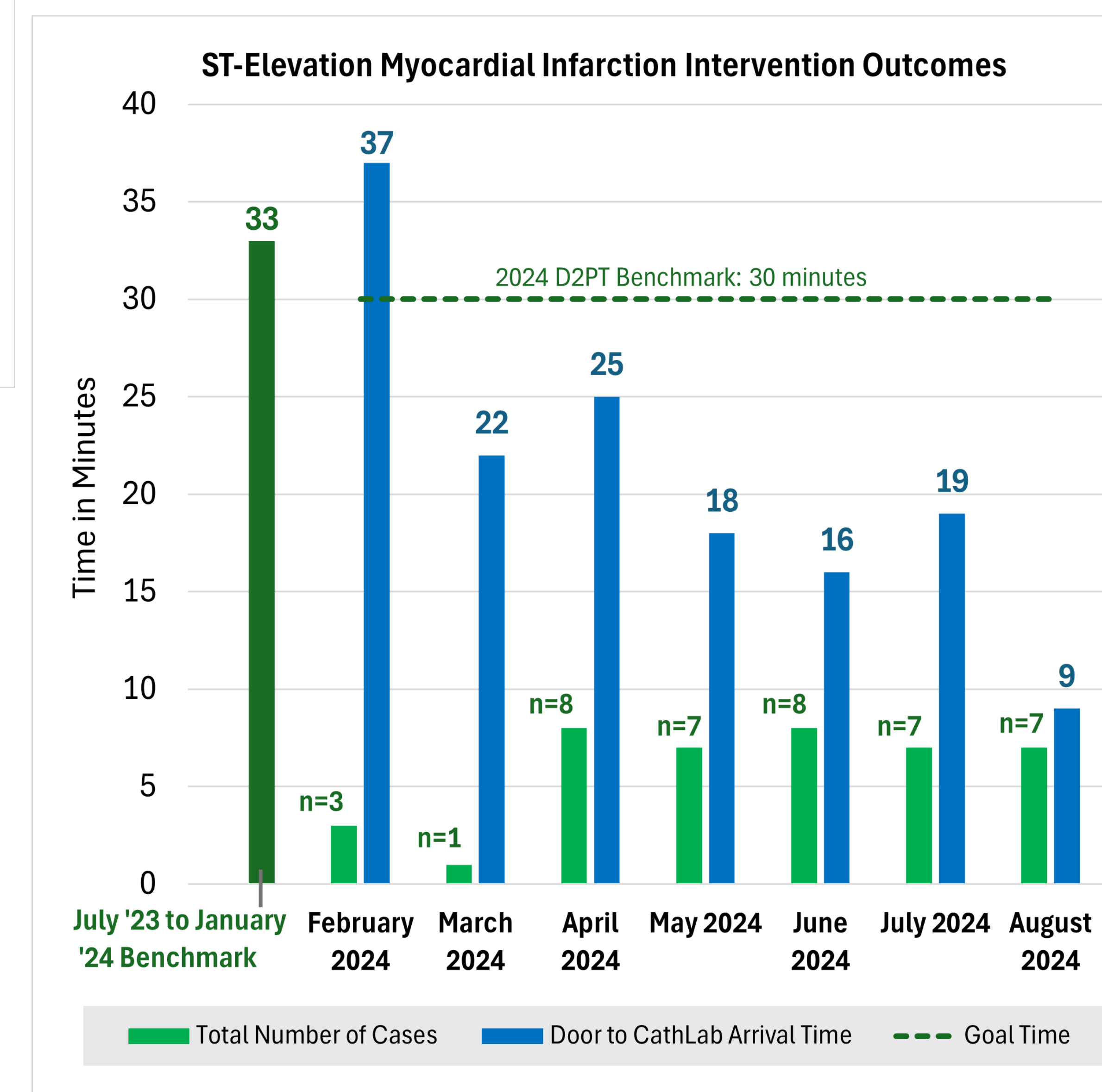
- Door to CT: Median of 26 min to 15 min; Goal: < 30 min
- Door to Needle: Median of 42.5 min to 31 min; Goal: < 60 min
- Door to Device: Median of 119 min to 89 min; Goal: < 90 min

Sepsis outcomes:

- 3-hour severe sepsis metric (antibiotic, blood culture collection, initial lactate) compliance from 92% to 96 %; 6-hour metric compliance (repeat lactate, crystalloid fluid admin., address hypotension) from 70% to 100%.
- 3-hour fallouts from 8 to 1; 6-hour fallouts from 2 to 3.

STEMI outcome in minutes (min):

- Door to Cath Lab: Median of 33 min to 22 minutes.



Discussion

- Implementation of the SIMS RN improved results of the quality metrics for stroke and sepsis patients in the ECC.
- Opportunity identified to increase focus on myocardial infarction care for ECC patients.
- Limited SIMS coverage over 24- hour day.
- Added benefits included: significant improvement in collaboration among physician specialists, advanced practice nurses, departments, and leadership and real-time staff education increased.

Implications for Practice

- The addition of a specialized nurse focused on the specific needs of the critically ill patients expedited care delivery, resulting in improved outcomes for reportable quality metrics.
- The addition of a SIMS RN enhanced teamwork among the RN's in ECC.
- SIMS RN satisfaction and recognition supported pilot to expand to next phase.

Acknowledgements

- SIMS RN TEAM
- Specialty coordinators for Sepsis, Stroke, and STEMI
- Data analyst experts
- Leadership Team