

Development of a Regional STEMI Management Guideline

Increases Fibrinolytic Therapy with Urgent Transfer to PCI

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Introduction

- The benefit of timely reperfusion in patients with acute ST-segment elevation myocardial infarction (STEMI) has been well documented.
- Primary percutaneous coronary intervention, which has proven mortality benefit over fibrinolysis in clinical trials, is the preferred reperfusion strategy.
- A substantial proportion of patients with STEMI cannot be transported directly to PCI due to geographic distance

Goal

- The goal of this study was to determine the significance and limitations of implementing a consensus driven regional guideline for thrombolytic therapy and urgent transport to PCI in STEMI patients transported to STEMI referral centers.

Methods

- We utilized the Mission Lifeline STRAC Regional Reports from 2nd quarter 2014 and compared it to 2nd quarter 2016. These dates were selected to represent before and after development of the guidelines
- We compared median time to reperfusion and method of reperfusion between the two time periods.

Results

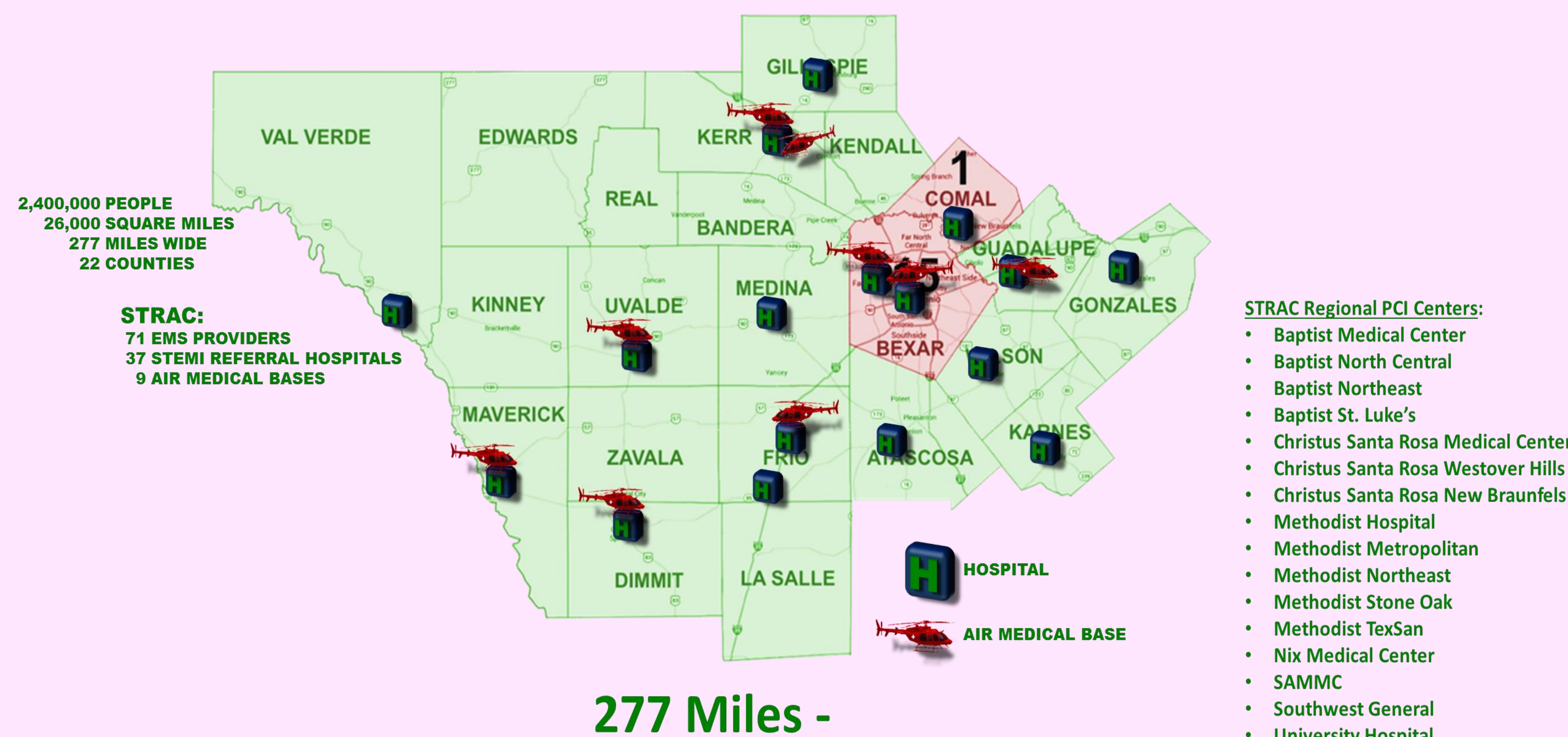


Figure 1. The geographic distribution of STEMI referral centers and air medical assets in the STRAC System

Table 1. Number of Patients Transferred to Regional PCI Centers

Q-2 2014	42
Q-2 2016	67

Results

- No difference in median time to reperfusion for direct to PCI between 2014 and 2016
- 30% reduction in time to reperfusion for patients receiving lytics before emergent transfer to PCI
- 3 fold increase in the percentage of STEMI patients receiving lytics prior to Transfer for emergent PCI

Limitations

- This data set includes only patients meeting all inclusion criteria for the Action Registry and Mission Lifeline Report. Not all regional STEMI patients are represented.
- This includes only STEMI patients transferred to a PCI center reporting to Action Registry.
- STRAC has developed the education materials, and is just now starting the education campaign for "Drip and Ship" Guidelines

Conclusion

During the second quarter of 2016, dramatically more STEMI patients received fibrinolytic therapy prior to transfer to PCI than in 2014

