

Cardiac alert process at Denver area free-Standing emergency departments

Kayla Hooper RN, CEN
Alicia Harris BSN, CEN



BACKGROUND

- Cardiovascular Disease (CVD) is the #1 cause of death in the US leading to approximately 800,000 deaths per year ¹
- 790,000 people in the US have MIs each year. Approximately 114,000 of those MIs will result in death ¹
- STEMI patients should undergo percutaneous coronary intervention (PCI) <120min from DX of STEMI. If estimated Door-PCI time is greater than 120 minutes, fibrinolytics should be considered ²
- Belmar ER (BMER) in Lakewood, CO and Southwest ER (SWER) in Littleton, CO are free-standing emergency departments (FSEDs) associated with Swedish Medical Center (SMC) in Englewood, Colorado. SMC is a PCI-capable facility where STEMI patients are typically transferred to from the aforementioned FSEDs. BMER patients are transferred to primary PCI centers via ground transport, and SWER STEMI patients are transferred to PCI centers via ground or air transport depending on weather and ETA of potential transport.

- Average Yearly Census for SWER: 19,710
Average SWER ESI Level: 3.1
- Average Yearly Census for BMER: 14,965
Average BMER ESI Level: 3.4

PURPOSE

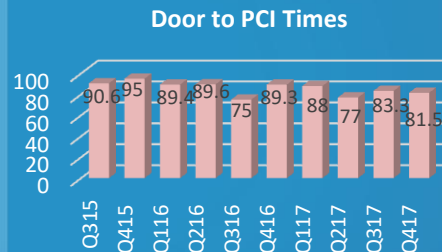
With the growing number of FSEDs in Colorado (about 50 ³) it is essential for these facilities to appropriately manage, treat, and transfer patients presenting with a STEMI. The purpose of this quality assurance project is to evaluate and reduce transfer times between the FSEDs and main hospital for immediate PCI treatment, within the national goal of 120 minutes, using appropriate transport methods of critical care or advanced life support.

OUTCOMES

- Timely transfer and treatment of patients, most of which receiving PCI less than the national average
- Interdisciplinary communication between the charge nurse and access center in order to expedite appropriate transfer

RESULTS

- We compiled data from the time when the second FSED opened (Q315) through Q417, averaging door to PCI and total number of patients for each quarter.



LOW VOLUME ALERT total number of patients transferred from Q315 TO Q417= 29

CONCLUSION

- Door to PCI times average less than the national average of 120 minutes, which includes transport of the patient to SMC by air or ground.

IMPLICATIONS FOR PRACTICE

- Identifying which transport method is most appropriate
- BMER has revised Cardiac Alert Protocol to allow for 911 ambulance transport should time delays occur with preferred critical care transport
- Each FSED sends a representative to sit on the bi-monthly Cardiac Alert Committee at SMC
- More data is being compiled in order to implement more change in current practice

REFERENCES

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