STEMI Assist Team: Time is of the Essence
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PURPOSE
The initial goal in 2012 of the team was to reduce the Door to Balloon times by 3-5 minutes with implementation of a STEMI Assist Team during “off hours”. The reduced time would provide better outcomes and timelier intervention for the patient.

BACKGROUND
Process implemented to have a STEMI Assist Team (S.A.T) to respond in the Cath Lab to STEMI patients during “off hours”. Off hours constitute M-F 1700-0700 and all weekend and holiday hours. The team’s primary function is to set up the Cath Lab and can accept the patient from the ED as they awaits the call team to arrive. This will allow for the patient to be in the treatment area and ready for intervention when the Proceduralist arrives.

METHODS
• Implemented a committee May 2012 to drill down the times during “off” hours.
• Communicated purpose to leadership and staff prior to implementation.
• Performed drills in the summer/fall of 2012.
• Included the ED and EMS (activation from the field) in mock survey.
• Full implementation on September 29, 2012.
• Continue to meet regularly with team and review opportunities for improvement.
• It was noted that RT was not comfortable during the initial stages with setting up the sterile table. Underwent focused drills and further training.
• There was feedback from some of the staff with their comfort level so the roles were further delineated (setting up the computer, etc.).
• Cath Lab staff made a step by step list that was posted in the lab.

DISCUSSION
• M-F, 7a to 5p – STEMI Assist does not respond. All cases are reviewed and opportunities are presented at Committee. Results continue to be under stated goal.
• Communicated a drill-down analysis on each STEMI Assist involved with a STEMI patient to leadership, physicians and staff, via email for reference and review of opportunities and acknowledgements. The communication highlights the time metrics: time for the Cath Lab activated to Cath Lab ready as well as current time for when procedure started (physician and Cath Lab staff) and finally the Door to Balloon times.
• Continue to have ongoing meetings on a quarterly (or as needed) basis to discuss initiative.
• Committee reviews goals and renews metrics for constant improvement.
• STEMI Assist drills are ongoing and initiated based on needs assessment (including participation with local EMS).

RESULTS

STEMI Metrics comparison since implementation of STEMI Assist Team
STEMI Assist Team began Oct 2012

Implementation of S.A.T with continual analysis of each occurrence resulted in a reduction of D2B during “off hours” by 14 minutes from 2012 to Q4 2014. Our successful process clearly exceeded the initial goal of 3-5 minute reduction in the Door to Balloon times. As a further result, the focus of S.A.T had an indirect impact on the overall decreased D2B with an average 48 minutes in 2012 with a progressive decrease to 40 minutes in 2014.

Summary of Results:
• Reduced STEMI activation to Cath Lab ready times significantly so staff can focus on the patient to start the procedure.
• Resulted in cardiologists receiving more time to spend on patients in a procedure in the Cath Lab as opposed to having them waiting in the ED.
• Decreased overall D2B times.
• Communicated case details allowing physicians, leadership and staff to review process opportunities and discuss.
• Utilized a team approach to reduce silos and improve communication.

Lessons Learned:
• Identified STEMI as a code situation and to assist the patient quickly to the Cath Lab.
• Decreased the D2B times with EMS activation from the field. As soon as they call in or page a global STEMI from the field, there is more prep time for the ER, STEMI Assist Team and Cath Lab staff prior to the patient’s arrival.
• Including physicians in the decision making increases their engagement in the process and resulted in better communication with staff and EMS.
• Concentrated on team involvement allowing Cath Lab staff to take over care from the STEMI Assist Team staff with the continued focus on further preparing the patient for the procedure.

CONCLUSIONS

STEMI Metrics comparison since implementation of STEMI Assist Team

<table>
<thead>
<tr>
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<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Difference 2012 to 2014</th>
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<tbody>
<tr>
<td>Door to Balloon</td>
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<td></td>
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<tr>
<td>(Goal ≤ 60 minutes)</td>
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<tr>
<td>All Cases</td>
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<td>7</td>
<td>-10</td>
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<tr>
<td>CL activated to CL Ready</td>
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<td>15</td>
<td>9</td>
<td>-12</td>
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<tr>
<td>All Cases</td>
<td>10</td>
<td>7</td>
<td>5</td>
<td>-5</td>
</tr>
</tbody>
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Door to Balloon Times

Goal ≤ 60 minutes

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