Healthcare Organization Commitment

Contact Details

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Position
Chief, Center for Quality Management

Organization Name
Taichung Veterans General Hospital

Commitment Details

How many hospitals are represented in this commitment?

<table>
<thead>
<tr>
<th>Last Report</th>
<th>Current</th>
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Action Plan

1. Organization of multidisciplinary team composing of members from quality improvement, Intensive care units, Emergency, Nursing, Medical Informatics and IT department. 2. Analysing the past events of unexpected resuscitation. 3. Resuscitation Optimization literature review and establish guidelines. 4. Education of physicians of the guidelines. 5. Establish work flow of initiating rapid response team. 6. Connect various monitoring devices with the hospital information system. 7. Building of early warning system by combining data from nursing assessment, EMR, and automatic monitoring devices. 8. Building of dashboard for monitoring. 9. Constantly review the effectiveness of the system and improve the system and work flow.
Commitment Update
1. We completed the team and completed the past event analysis. 2. We retrospectively collected the data from our EMR data warehouse 2007/01/01~2017/12/31. 3. The enrolled criteria were patients hospitalized at general wards in each of the six departments (Pulmonary, Gastroenterology, General Surgery, Hematology, Nephrology, and Colon-rectal surgery). 4. We calculated the NEWS of 3h, 6h, 12h, 24h, 48h, and 72h before the onset of AE. 5. Using neural network methodology for learning, our initial analysis showed excellent predictability. 6. We are currently working on alerting physicians by building a dashboard and implemented in the workflow.

Other
Challenge 10 - Systematic prevention and resuscitation of in-hospital cardiac arrest

Please describe any best practices your organization has learned through your commitment and share valuable lessons or challenges that were overcome.

Our early predication model using neural network looks more accurate than the NEWS system. (NHS national Early Waring Score). Continue exploration in this direction is promising.

Impact Details

<table>
<thead>
<tr>
<th>Initial Commitment</th>
<th>Commitment Update</th>
<th>Project Next Year</th>
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<tbody>
<tr>
<td>Lives Lost 90</td>
<td>Lives Lost 70</td>
<td>Lives Lost 50</td>
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<tr>
<td>Lives Spared Harm Target 40</td>
<td>Actual Lives Spared Harm in last 12 months 50</td>
<td>Lives Spared Harm Target for following calendar year 30</td>
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<tr>
<td>Lives Saved Target 10</td>
<td>Actual Lives Saved in last 12 months (might differ from initial target) 40</td>
<td>Projected Target of Lives Saved for following calendar to try to finish commitment 30</td>
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New Lives Lost (lives lost – actual lives saved)
50

Acknowledgement
Yes, I acknowledge that this commitment may be used for external communication and publicly announced at the World Patient Safety, Science & Technology Summit. Furthermore, I agree that this commitment may appear on the website of The Patient Safety Movement Foundation or the Masimo Foundation. I also give permission for my commitment to be used in support of the promotion of the World Patient Safety, Science & Technology Summit as well as The Patient Safety Movement initiative.