Accessing, Analyzing and Using CPR Data in Alaska

BRIEF BACKGROUND
The Matanuska-Susitna Borough EMS team in Anchorage, Alaska was unable to access its CPR case data. As such, it was difficult to gauge the effectiveness of their performance. They also did not have the leadership support to move forward with a formal system to track and analyze their CPR case data. Instead, they focused on two goals:

- To record and review their CPR case data
- To improve their EMS-delivered CPR

STEPS TAKEN
The team integrated cardiac monitors into their processes and started tracking and reviewing data about CPR performance. They also adopted the Resuscitation Quality Improvement Program for EMS Providers and began focusing on areas where EMS-delivered CPR could be improved.

CHALLENGES
Leadership was worried that case data would be discoverable or reflect poorly on its EMS organization. They overcame this barrier once leadership changed and acquired the means (cardiac monitors) to collect the data, and then pushed the project forward as soon as the new leadership team came onboard.

Tribal knowledge provided a barrier to improving EMS-delivered CPR. Additionally, there was resistance to accepting CPR feedback. The team overcame these barriers with persistence, patience and communication. They researched and shared information, and sought an economical, objective solution.

RESULTS
Tracking CPR case data helped the team discover areas for improvement in delivering high-quality CPR. The data was used to provide ammunition for a second project regarding CPR improvement.

In addition, their CPR fraction scores increased year over year. This includes trauma cases, as well as cases they had documented explanations for poor CPR quality. (Note: Actual CPR fraction is higher than indicated. The manual CPR device counts negatively on performance.)

<table>
<thead>
<tr>
<th>Year</th>
<th>CPR Fraction</th>
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<tr>
<td>2016</td>
<td>Single digits</td>
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<tr>
<td>2017</td>
<td>56.65% (with 29% compliance of submitting the data, a top score of 93.63%, and a bottom score of 4.5%)</td>
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<tr>
<td>2018</td>
<td>64.84% (with 64% compliance of submitting the data, a top score of 94.38%, and a bottom score of 13.52%)</td>
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The team’s ROSC rates increased year over year:
- 2017: 22% (71 cases, 16 ROSC)
- 2018: 35% (84 cases, 30 ROSC)

Coincidently, the team encountered emergency CPR administration at the Alaska Fair by an individual who had just learned hands-only CPR at their booth.

OUTLOOK

The team uses the RQI for Hospitals Program to maintain individual skills. However, because of staffing resources, ongoing team training is not currently possible. The leadership team is working to reconfigure budgets to overcome this barrier.

CONTACT

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