Project Title: Alberta Health Services Emergency Medical Services (AHS EMS) Excellence in Resuscitation Coins Program

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Background: In 2016 AHS EMS joined a national research study to improve outcomes from out-of-hospital cardiac arrest (OOHCA). In reviewing data, we were moved by our colleagues' performance in these difficult and dynamic situations. We identified that a problem in our organization was a lack of formal recognition for our colleagues who provide the highest quality clinical care in difficult situations. We further recognized that celebrating clinical excellence creates a culture of high performance, which improves outcomes. The solution we chose was to create a challenge



coin to be presented to paramedics and Emergency Communication Officers (ECOs) who demonstrate excellence.

Implementation: Our team worked with leadership, other EMS departments, and the EMS Foundation to approve and sponsor two concurrent ceremonies in Calgary and Edmonton in September 2022. In addition to designing the coin and seeking out sponsorship, we needed to create a process that identified events that demonstrated clinical excellence. We defined clinical excellence using quantitative measures such as time to initiate telephone CPR and high-performance CPR metrics, and qualitative peer committee selection criteria for resuscitation under arduous conditions and outstanding contribution to resuscitation. Our team, who routinely review cardiac arrest events, layered the process of identifying events that may be eligible for an award on top of this routine work and used quantitative measures already being collected. To sustain this initiative, the team requires additional time to identify events and organize the ceremony to be embedded into regular work schedules, and continued sponsorship from the EMS Foundation.

Evaluation Methods: The evaluation of this innovation consisted of ensuring that there was equitable and transparent selection of award events and feedback on the awards ceremony. Our team carefully assessed each cardiac arrest event for those with the highest quantitative measures (e.g., compression fraction, rate, etc.) as well as those eligible for peer choice blinded by location and paramedics. The top three events for strength in metrics were awarded a coin in both Edmonton and Calgary, and the top event for metrics for North, Central, and South zones. One peer choice event was selected for each zone, while Calgary had two equally challenging events that tied. Ad hoc feedback was received from the patient attendee, paramedics, and leadership, and was overwhelmingly positive. The primary unintended consequence was paramedics

perceiving this initiative as biased or unfair, which underscored the importance of transparency in selection criteria, blinding, and peer selection rather than selection by management.

Results: We created a process to recognize excellence in clinical care that builds upon existing data collection for research, and to date have handed out 42 Excellence in Resuscitation Coins in two concurrent awards ceremonies. This project is an important part of a suite of initiatives aimed at: 1) highlighting the importance of CPR and resuscitation, 2) increasing the quality of CPR and resuscitation, and 3) improving outcomes from OOHCA in Alberta. Recognizing those that hold themselves to the highest standards of care, in combination with education and measurement of performance, is critical to support our colleagues in aligning their practice with best evidence and creating a culture of clinical excellence; ultimately improving health outcomes. While we are early in the program, we have already seen how two elements of CPR quality are improving over time (Figure 1) thanks in part to this program and the dedication of our frontline colleagues.

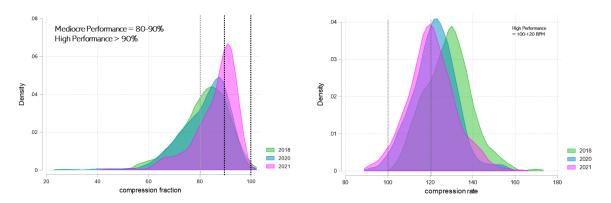


Figure 1: Changes in CPR compression fraction and rate over time in Calgary and Edmonton zones.

Advice and Lessons Learned: Three important lessons in building a recognition program for clinical excellence:

- 1. Opportunity costs must be recognized. This program will come at the expense of other work and must be accepted, or the program will not be sustainable.
- 2. Funding is critical to success. There is a cost of purchasing awards and hosting an event but partnering with a not-for-profit sponsor was an effective fiscal strategy.
- 3. Patient partnership is important. The feedback from our patient and the paramedics involved in his care suggested that this is an important element that frontline care providers rarely get to experience and is beneficial for providers and patients.

The next iteration of this initiative will increase the number of cardiac arrest events that could be considered, increase the funding to allow the families of front-line providers to attend, and possibly amalgamate the awards ceremonies into one location with an increased travel budget.