Out-of-Hospital Cardiac Arrest (OHCA) Quality Improvement Feedback Program in Seattle, Washington

BRIEF BACKGROUND
The Seattle Fire Department (SFD) response to any OHCA consists of two firefighter/EMT units and one medic unit staffed by two paramedics. In an effort to provide comprehensive feedback on every resuscitation to all EMTs and paramedics that cared for a patient, SFD has teamed up with the University of Washington Department of Emergency Medicine to create a post-event review email that is sent to the crew.

STEPS TAKEN
The data collected includes the continuous EKG waveform and audio recording from all defibrillators, the patient care record, a separate OHCA notification form completed by the BLS companies, and corresponding hospital outcomes. The QI team uses the corresponding proprietary software, CODESTAT, to review each case. We provide data from CODESTAT as well as dispatch times, the turnout times for each unit, the compression ratios, the number of pauses greater than 10 seconds, and the length of the longest pause. Additionally, the crews receive general comments on things they did well, things to work on, and the outcome of the patient if the patient was transported.

CHALLENGES
Occasionally, the cases are not uploaded to CODESTAT or do not have audio due to limitations in the technology. Ensuring that all cases are captured with audio requires daily data tracking. The process is labor intensive.

RESULTS
The crews have expressed their gratitude to the research team for the direct feedback. Each of the “goals” set by the QI team gives the providers a metric to strive for. These have been decided based on a mixture of empirical evidence and known high-performance CPR practices.

As an example we share a case that involved a young man who had a witnessed VF arrest. The patient received rapid care and transport which ultimately led to his discharge from the hospital with good neurological outcome. His case was thoroughly reviewed and a feedback email was sent to the BLS and ALS providers. This case is an excellent example of the feedback provided for a case in which the outcome was ideal, but some steps in the provision of care could have been improved.
OUTLOOK

The QI team has been sending feedback for many years, but has recently adopted an email-based system. We are continually adapting the program based on feedback from the receiving providers. We believe such comprehensive feedback is essential in creating a culture of excellence.

CONTACT

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