RQI-Telecommunicator Pilot Program Increases Survival Through Simulation and Continuous Quality Improvement

BRIEF BACKGROUND

Every day in the United States, almost 1,000 people will suffer an out of hospital cardiac arrest. Most of these instances will result in a call to 9-1-1 and will be answered by a Public Safety Telecommunicator.

Public Safety Telecommunicators are the first, first responders to a patient in cardiac arrest. However, cardiac arrest calls account for approximately 1%-2% of all calls received. Skill decay over time caused by a lack of exposure and ongoing training results in extended times to recognition of arrest and delivery of telephone CPR instructions, and in certain instances, missed identification of the arrest.

STEPS TAKEN

Resuscitation Academy’s program, RQI-Telecommunicator (RQI-T) is a continuous learning and quality improvement program grounded in evidence-based science and education principles. Embracing the principles of low-dose, high frequency, or spaced learning, program participants participate in quarterly cognitive learning, simulation exercises to improve their competence in receiving calls for cardiac arrest.

The Resuscitation Academy and RQI-Partners, a partnership between the American Heart Association and Laerdal Medical, conducted a proof of concept pilot of the RQI-T program with Public Safety Communications Centers in 3 countries.

As part of the pilot activities, quality assurance reviews were conducted on 50 calls for cardiac arrest to establish baseline performance prior to telecommunicators entering the program. These calls were measured to determine their ability to meet the American Heart Association T-CPR Performance Recommendations (www.heart.org/dispatchercpr), which include:

- Time of call to recognition of OHCA – 120 Seconds
- Time of call to delivery of first T-CPR directed chest compression – 180 seconds

Pilot participants completed a cognitive assignment that delivered learning on the science of resuscitation and the delivery of high-quality CPR.

Upon completion of the cognitive learning assignment, pilot participants completed a simulation exercise. The simulation scenario replicated a real-world call that may be received by the telecommunicator, and measured performance utilizing the same process and metrics as the baseline assessment.

CHALLENGES

RQI-T represents a shift from traditional thinking and operational/training siloes to a systems approach. This type of change is never easy to implement, as it requires a significant adjustment to highly ingrained culture.
RESULTS

Program participants demonstrated measurable performance improvement over baseline assessment performance.

Key Performance Indicator Times

![Graph showing baseline performance comparison](image)

OUTLOOK

When widely adopted, the RQI-Telecommunicator program will foster improved performance metrics, highlight successes and potential areas for improvement or learning, and ultimately save more lives.

CONTACT

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