

CASE STUDY

The Resuscitation Research Group
Edinburgh University



Overview

The Resuscitation Research Group (RRG), at the University of Edinburgh is based in the Emergency Department of the Royal Infirmary in Edinburgh. The group's aim is to co-ordinate, facilitate and promote quality research in Resuscitation Medicine and in 2013 RRG won a research award for their TOPCAT2 study into pre-hospital cardiac arrest resuscitation.

The Challenge

RRG had been looking to improve Out of Hospital Cardiac Arrest (OHCA) outcomes in Edinburgh and across Scotland.

Working with the Scottish Ambulance Service, they examined the whole process of OHCA care, from the emergency call, through to post resuscitation care and beyond discharge from hospital.

The project included emphasis on leadership skills, procedure and equipment changes, and it soon became clear that they would need a mechanism to audit the pre-hospital resuscitation provided by paramedics in the field.

This was necessary to optimise the implemented protocols and identify training requirements, as well as to assist in the evaluation of new equipment.

It was also important to preserve patient and medical confidentiality, while the camera needed to be unobtrusive and have a low impact footprint for the paramedics.



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Edinburgh*

Key Benefits

- ✓ Evidential video and audio recording
- ✓ 8 hours recording, 72 hours standby
- ✓ 150 degree horizontal field of view
- ✓ Day and night operation
- ✓ Robust and waterproof
- ✓ Simple process for allocation of VideoBadges
- ✓ Secure encryption of video and audio recording
- ✓ Configurable access for data security

The Solutions

The team chose to deploy VideoBadge - a lightweight, secure body worn video system from Edesix.

The cameras fix securely to a paramedic's uniform and require a single action to activate, leaving their hands free to operate equipment and attend to patients as usual.

VideoBadge was issued to the Resuscitation Rapid Response Unit (3RU), who are sent out to each reported OHCA, by paramedic motorbike or fast response vehicle.

The VideoBadge units are charged before each shift, at the ambulance stations.

The paramedics currently only record OHCA, from the moment the call comes in to the point where the patient is delivered to the resuscitation room at the Royal Infirmary. They return their VideoBadge to charge each night. Every few days, the RRG team collect the VideoBadges from the ambulance station, swapping them with units they bring with them.

The VideoBadges are taken to a secure footage room at the Royal Infirmary, where they are downloaded into the VideoManager software which manages and securely stores the captured video.

The research team then categorise the footage into incidents, recording notes based on outcomes and patient interactions.

The video is kept within VideoManager, in the secured footage room, thus providing the requisite level of medical confidentiality. The software also allows the implementation of an automatic deletion policy ensuring that footage is not retained unnecessarily.

The Results

The RRG team use the footage to audit the use of new protocols, to analyse and collect interactions between paramedics, and to identify best practice in leadership and OHCA protocols.

VideoBadge also made it possible to evaluate the impact of new equipment such as a mechanical chest compression device while out in the field.

Due to the sensitive nature of recordings taken in a medical emergency, the in-built security safeguards were key to the selection of VideoBadge for this project.

The unobtrusive appearance and simple operation also meant that patients and staff were not hampered by its presence and treatment could be administered effectively.



The Future

As part of the 3RU project, the number of VideoBadges deployed will be scaled up amongst the OCHA specialist paramedics, with 3 Ambulance stations going live in early 2013.

RRG are working closely with Edesix to help define the next generation VideoBadge requirements, in order to increase optimisation for the demanding pre-hospital environment.

Interested?

If you think that VideoBadge can help your company in any way then please feel free to give us a call on:

0131 510 0232

or alternatively send an email to:

sales@edesix.com

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www.edesix.com | sales@edesix.com