

Cabinet Secretary for Health and Wellbeing

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*Dear Jamie*

Thank you for your email dated 18 September 2013 regarding the Scottish Ambulance Service Parliamentary event and the rollout of the automatic chest compressor.

May I say how glad I was to read that you were so impressed by the enthusiasm and professionalism of the Scottish Ambulance Service staff. I am sure you will agree that ambulance crews across the country do a fantastic job, and that for many people the ambulance service is the beating heart of the NHS, providing vital services to patients when they need it most.

As you may be aware, out-of-hospital cardiac arrest remains one of the leading causes of mortality across Europe. To improve patient outcomes for a cardiac arrest, the "chain of survival" is paramount, such as early recognition, early CPR, early defibrillation and early transfer to a definite care setting. The Scottish Ambulance Service plays a pivotal role in delivering this.

A pioneering pilot called the TOPCAT2 study was undertaken by the Scottish Ambulance Service and Emergency Medical Consultants from the University of Edinburgh. In the study a team, known as the Resuscitation Rapid Response Unit, collect and audit data from defibrillators for review, analysis and training, and undertake ongoing classes with consultants and a resuscitation officer to continuously improve resuscitation. The Scottish Ambulance Service reported national performance for the return of spontaneous circulation (ROSC), meaning the resuming of cardiac activity following a cardiac arrest, for the year 2012/13 at 17.5% (against a target range of 12%-20%). However, in the NHS Lothian area, the performance returned was 23.9%, demonstrating the effectiveness of this study.

The TOPCAT2 model will now be rolled out to the NHS Lanarkshire area by March 2014. This will allow the Scottish Ambulance Service and partner clinicians to further test the model in a different geographical area and work with staff on cardiac improvements.

After this phase has concluded, a detailed sustainable roll out plan will be developed and will consider the delivery of this service model across the rest of the country.

One of the devices the study team used was an automatic chest compressor (sometimes known as a mechanical CPR device) and this is the device you asked about in your email. I can confirm that the evaluation of this device is ongoing and the Scottish Ambulance Service intends to use the outcomes of the evaluation to determine any roll out plans for the automatic chest compressors in early 2014.

In addition to this, QCPR modules are also being rolled out across Scotland. QCPR modules are small devices that stick on the chest of a patient before starting CPR. They capture the speed of resuscitation, depth of each compression, any gaps in CPR etc. They produce a whole record of the resuscitation, encouraging hands on chest time, which is what makes the most difference in survival. An additional 390 QCPR modules have been purchased for use across the country, with a further 150 standalone QCPR units having been purchased for use by first responder groups. The Scottish Ambulance Service has confirmed that at present, QCPR modules have been rolled out to ambulance crews in Inverness, Stornoway, Tain and Fort William. 10 devices have also been allocated to Community First Responder schemes in the North Division and they are also in the process of being rolled out.

The Scottish Ambulance Service also has a comprehensive programme of support through their Community Resilience Department to enhance the resilience of communities, particularly in our most remote and rural areas. They support communities in the education and teaching of CPR techniques, provide advice on the placement of Public Access Defibrillators and also support over 100 Community First Responders schemes throughout Scotland.

I hope this helpful.



**ALEX NEIL**