**All Party Parliamentary Group for Defibrillators**

*Solution Providers*

**Date**: 24th October 2023

**Time:** 14.15 – 15.00

**Chair**: Lord Aberdare

Minutes takes by: Emily Short, DGA (Secretariat)

**Members Present**:

* Lord Aberdare

**Speakers**:

* Michael Bradfield, Director of Clinical and Service Development at the Resuscitation Council
* Dr Vicky Joshi- Glasgow Caledonian University, Physio and Expert in Cardiac Arrest Aftercare
* Dr Steven Brooks, Emergency Physician and Chief Medical Officer for Rapid Response Revival
* Mark Wilson- Consultant Neurosurgeon at imperial College NHS trust, Co-Founder and Medical Director of GoodSAM
* William Spencer, British Red Cross Product Manager

**Audience:**

* James Cant, Resuscitation Council UK
* Tamsin Melville, DGA (Secretariat)

**Minutes**

**Lord Aberdare** opened the meeting and welcomed the external speakers to the sixth, and final, APPG for Defibrillators session. He mentioned that the next step after this meeting was for the Group to produce a report on what they believe needs to be done in terms of policy, to promote greater availability, awareness and use of defibrillators.

Lord Aberdare then handed over to Michael Bradfield to introduce himself.

**Mr Bradfield** began by offering his thanks to the group. Since the formation of the APPG, he has been heartened by the way in which conversations about defibrillators have risen up the agenda of the political parties, and have even been discussed in the House of Lords.

He suggested that the key aim was to increase confidence and knowledge in the public sphere around defibrillators, but operating within the existing healthcare architecture that we already have. There is currently a 10% survival rate for cardiac arrest sufferers, and we need a national initiative to improve this. He then suggested three points to counter this:

1. He described that there was an inequality issue in the location of defibrillators. The AEDs tended to be located in more affluent areas with a less dense population, therefore more defibrillators needed to be located in higher risk areas.
2. CPR training should be taught nationally. It is already featured on the national curriculum, yet there is no evidence showing that teachers have the right support, knowledge or time to teach this. He suggests innovation opportunities are necessary to increase knowledge.
3. Survivors need increased access to ongoing and personal support. Although there is wraparound care offered currently, it is not comprehensive enough. For physical and psychological recovery, survivors need a multidisciplinary approach to post-cardiac arrest support.

**Dr Vicky Joshi** followed on from Mr Bradfield to talk about survivors. Back in 2016, survival of a cardiac arrest was rare and research sparce. Now in 2023, there is better understanding of the problems survivors face and what proportion suffer further symptoms. What is lacking is applying that knowledge in practice; a few suggestions she has to address this includes creating a more joined up pathway of care, so identifying survivors early in hospital and giving themselves, along with family and friends, information about the next steps. Hospitals can then do early screenings for problems that may arise and make sure they are referred to the appropriate services. Another suggestion is to start tailoring support to individuals, so allowing a flexible access to starting rehab at any point in recovery, rather than the current process which offers support at the 6 week point, and then never again.

**Dr Steven Brooks** talked about using innovation to move away from the static location of AED’s on walls. Less than 3% of people who arrest out of hospital have access to a defibrillator, which he described as a lost opportunity to save lives. Dr Brooks went on to introduce Rapid Response Revival, which is the world’s smallest affordable personal defibrillator designed to be carried in bags or stored in glove boxes. It is currently available in the UK, so he hoped it open the door for other companies to innovate and think along similar pathways.

**Mark Wilson** introduced GoodSAM which is a platform that alerts off duty medical personnel of cardiac arrests, meaning that they can get to the scene to start CPR earlier than an ambulance. He described how this worked, with an alert being sent out once 999 has been called. Currently the system is deployed across the UK, US, Austarlia and NZ, with survivors being recognised every other day. Mr Wilson culminated his speech describing the latest update from GoodSAM, which uses camera technology to livestream the scene to medical professionals, allowing them to better understand the emergency and then guide the caller through CPR.

**William Spencer**, was then introduced. He described how the education around cardiac arrests is old fashioned, and change was needed in this area. He mentioned that education could take different forms, whether that be via apps and social media, or educators going into schools and youth groups. He summarised by suggesting that more people need to have lifesaving skills.

Questions were then opened up to the speakers.

**James Cant** said that there was a low percentage of times when defibrillators were used during an out of hospital cardiac arrest, meaning the first thing that needed to be addressed was ensuring the defibrillators were situated in the right place to begin with. Once they are in these places, then GoodSAM will be even more successful at saving lives.

**Dr Brooks** replied that this would need multiple layers of intervention, which he felt was necessary to highlight in the report. The gaps he mentioned included the response in the first few moments of a cardiac arrest, and in the care and treatment of survivors.

**Lord Aberdare** then asked what the priorities were for the government to focus on in order to address these issues raised?

**Mr Bradfield** answered this question, highlighting again his three key elements. He narrowed in on the lacking availability of defibrillators as well as the importance of spreading knowledge on their use; 60% of people he found were not confident in using them, and 40% did not even know they were allowed to use them. He stated that having CPR on the school curriculum was an important step forward, but that there was no way to see how it was being taught.

Mr Bradfield commented that wrap around support was needed from NHS England and Central Government, and whilst this group could make recommendations for change, it needs their help to make active changes.

**Lord Aberdare** then asked what the barriers were to delivering these 3 steps?

**Mr Brooks** answered this with two points. Firstly, he discussed needing to assign accountability for cardiac arrests. There is currently no organisation or local government council that is accountable for cardiac arrest sufferers. It is seen as pure luck when someone gets bystander CPR, but when this does not happen, no one is held accountable. He felt this needed to change.

Mr Brooks’ second point was in regard to requirement. Currently all new residential buildings above a certain size have to have a defibrillator installed, and he felt more legislation like this was needed from the government.

**Lord Aberdare** then asked what was needed at policy level to promote training of CPR?

**Mr Spencer** described how at this current time, there is no way to assess how the school curriculum on CPR is being taught. The Resuscitation Council, along with similar charities, are working hard to get trainers into spaces to teach, supported by online aids, but he does not know if all schools are taking advantage of this.

**Lord Aberdare** asked if there was anything to learn from the blood donation system? He questioned whether employers could take the lead in training, as they have done in the past with blood donation schemes.

**Mr Spencer** said that training needed to be little and often to give people the confidence to act when a cardiac arrest does happen.

**Mr Bradfield** suggested that CPR training could have legislation linking it to everyday practices, such as attaining a driving licence. He felt this would create the next generation of society with the skills to save a life. The challenge he suggested was getting people to complete the training as the products (such as online aids) were already available.

**Mr Cant** replied suggesting that timing of this legislation needed to be key. When legislation about CPR on the school curriculum was introduced, it was during the Covid-19 pandemic, hindering its success and notoriety. Therefore, if legislation is passed, it needs to be at the correct time. Evidence from the Netherlands has also shown that little and often is the most effective way of spreading knowledge, and as Mr Cant suggested, this needs to be embedded in peoples day to day experiences.

**Mr Wilson** followed this with two points. He repeated the others, suggesting that the training mechanism is there, but that there needed to be an ethos change in society. Similar to the way that Covid-19 became about “looking after your friends and family”, being able to save a life due to knowing CPR needed a similar ethos. Mr Wilson also agreed with Mr Brooks about the necessity of an accountability in society.

**Mr Aberdare** then moved to the final issue about survivors of cardiac arrests, questioning what barriers there may be in this section.

**Dr Joshi** answered and agreed with the other speakers. She described how at the moment, cardiac arrest survivors do not belong in one area of the medical profession. Symptoms post-cardiac arrests need to be understood as long-term health conditions by medics, as well as family and friends of survivors. Once awareness has increased, then the pathway for survivors can be improved, helping to get them into the existing rehab services.

Dr Joshi also recognised that with increasing knowledge and technology to save lives, people are surviving where they would not in the past. This has created a cohort of sicker survivors who need increased support.

**Lord Aberdare** then opened up the floor to allow each speaker the chance to add any final comments that have not already been covered.

**Mr Spencer** offered his thanks to the group, reiterating that innovation was the way forward.

**Mr Wilson** agreed with the innovation comment of Mr Spencer, suggesting that resources were not the issue, but instead the lack of knowledge.

**Dr Brooks** wanted to highlight the hard work of the 999 call takers for the report, and described how he wanted to continue working together with scientists, the NHS and policy makers to take the next step forward.

**Dr Joshi** said that we still needed to consider the bystanders; by attempting to save a life, bystanders were often being asked to step up and do something that is scary and foreign to them. 90% of cases end in death, so there needs to be increased conversation about, and support for, the bystanders afterwards. She also discussed groups being missed in CPR training, specifically cardiac survivors, meaning she suggested thinking about teaching the “unhealthy” people as well as the “healthy” people.

**Mr Bradfield** finished reiterating his thanks, saying he hoped to work with everyone in the future to see tangible change.

**Lord Aberdare** ended the meeting by thanking everyone for their contributions to the debate, and saying that the report would be published in due course.