

Innovating for Improvement

Co-ordinated Co-response to Immediate Life Threatening
Emergencies (ILTE) in Adults in Remote and Rural
Scotland

Scottish Ambulance Service



About the project

Project title:

Co-ordinated Co-response to Immediate Life Threatening Emergencies (ILTE) in Adults in Remote and Rural Scotland

Lead organisation:

Scottish Ambulance Service

Partner organisation(s):

Scottish Fire & Rescue Service

Project lead(s):

Dr James Ward – Medical Director, David Bywater – Consultant Paramedic, David Route – Area Manager, Garry MacKay – Group Manager, Susan Baxter-Wynne – Improvement Advisor, Steven Short OHCA Clinical Effectiveness Lead

Contents

| | |
|---|----|
| About the project..... | 2 |
| Part 1: Abstract..... | 3 |
| Part 2: Progress and outcomes..... | 4 |
| Part 3: Cost impact | 11 |
| Part 4: Learning from your project..... | 13 |
| Part 5: Sustainability and spread..... | 16 |
| Appendix 1A: Feedback from SFRS and SAS instructors and SFRS station manager..... | 18 |
| Appendix 2: Project finance..... | 21 |
| Appendix 3: Feedback to the Health Foundation..... | 22 |

Part 1: Abstract

The aim of this trial was to test and implement a collaborative co-response to Out of Hospital Cardiac Arrest (OHCA) in Scotland's remote and rural communities, between the Scottish Ambulance Service (SAS) and the Scottish Fire and Rescue Service (SFRS). SAS and SFRS have successfully developed this innovative partnership to test and implement a collaborative co-response to OHCA in Scotland's remote and rural communities.

Key results from this trial show we successfully demonstrated:

- A quicker response time to OHCA
- An increase in the number of responders (minimum of 6 personnel),
- SFRS responders can be trained to be able to successfully recognise and deliver effective CPR and defibrillation
- On-scene communication between SAS and SFRS personnel was effective
- An effective training programme can be delivered to SFRS personnel on the wider issues of OHCA management e.g. care of the patient's relatives and awareness of DNACPR
- Staff satisfaction with the trial, particularly with both organisations working in partnership with each other on this collaborative type of work, and how this has a positive impact for the communities they serve.

Key learning points from the trial, which will help inform further rollout include:

- Communication between both organisations control rooms could be improved to speed up SFRS dispatch
- CPR quality was generally good, but the training package can be modified to stress the importance of full chest compression release
- Staff engagement with SAS employees in co-responding areas could be more effective

Word Count 240

Part 2: Progress and outcomes

Co-Responding

OHCA remains a significant healthcare challenge in Scotland. Approximately 3000 patients undergo attempted resuscitation each year following an OHCA. In Scotland survival rates from this condition are lower than we expect at around 6.4% survival to hospital discharge. Our aim is to increase survival to 15% by 2020.

The key factors in determining survival from OHCA include early recognition of cardiac arrest, early high quality Cardio-Pulmonary Resuscitation (CPR) and early defibrillation. In an effort to establish a consistent and effective response to OHCA SAS recognises that it cannot achieve this in isolation, and must work with partner agencies such as the Scottish Fire & Rescue Service (SFRS) particularly in remote and rural communities where geography poses a significant challenge to this time critical response. By drawing on the existing resources of the SFRS through a formal partnership co-response to OHCA, this will contribute to improved patient outcomes in these communities. Where such co-response models exist between emergency services in other countries, there are clear benefits for the communities that they serve such as; improved response times, capacity to handle increased volume of calls, and most importantly, the timely delivery of life saving intervention and support for patients.

The initial plan for this project was to trial co-responding in Argyle and Clyde with the remote island of Mull and rural mainland town of Oban initially being selected. Early on in the trial there were no OHCA within the trial area. The project team decided to broaden the scope of the trial locations to include Musselburgh, Hawick, Coldstream, Lauder, Bathgate, Linlithgow, Turriff, Maud, Falkirk, Livingston, Braemar, Elgin as well as Tobermory, Bunessan, Craignure, Salen and Oban. Figure 1 shows the geographical spread of these locations across the country. We also decided to use simulation to test the process within the original trial site.

Table 1 shows the SFRS activity by station during the period 01st August 2016 through to 30th June 2017 and the number of incidents driven specifically by SAS request. This information is provided to give an understanding of the general level of activity typically faced by each of the stations involved.

Table 1.

| FSEC ID | Station name | Incidents attended 01/08/2016 – 30/06/2017 | SAS originated incidents/(OHCA incidents)¹ | Activity levels driven by SAS requests |
|----------------|---------------------|---|--|---|
| FSL44 | Lauder | 68 | 9 (3) | 13% / (4.4%) |
| FSG68 | Turriff | 134 | 14 (4) | 10% / (1.5%) |
| FSC15 | Falkirk | 1476 | 65 (24) | 4% / (1.6%) |
| FTL63 | Bunessan | 8 | 0 | 0% |
| FTL57 | Craignure | 14 | 0 | 0% |
| FTL58 | Salen | 13 | 1 | 8% |
| FTL12 | Tobermory | 62 | 2 | 3% |
| FTL02 | Oban | 334 | 13 (2) | 4% / (0.3%) |

Lauder

Attended three OHCA's during period where one incident was identified on arrival as not being 'OHCA' and was actually an injured motorcyclist. The other two incidents involved a single fatality at each but only one incident had 'hands on' from the Fire Service

Turriff

Attended four incidents during the period resulting in four fatalities. On three occasions defibrillators were deployed in conjunction with other first aid. Response times to all incidents were between 16-18 minutes.

Oban

Attended two incidents during the period where two casualties were admitted to Lorne & Islands hospital. The 2nd incident appears not to have been 'OHCA' and was a call to assist with bariatric patient who later went into cardiac arrest. Crews assisted SAS administering CPR.

Falkirk

Attended 24 incidents during the period and were 1st in attendance on 21 occasions. Response times to all 24 incidents fell between 5 and 13 minutes. There were 13 fatalities and six casualties recorded from 19 incidents where the crews were involved with casualties. Defibrillators were used 9 times, resulting in 4 ROSCs

Figure 1



From these locations, the SFRS co-responded to OHCA with SAS and successfully demonstrated that this partnership improved the response to all steps in the “Chain of Survival” (Figure 2). The chain of survival describes four key, inter-related steps, which if delivered effectively and in sequence, optimise survival from OHCA

In particular this collaboration improved the response to steps two and three of the Chain; early CPR and defibrillation, to patients in the pilot areas. This was demonstrated with faster response times and high quality CPR and defibrillation being delivered by SFRS personnel.

The final step in the chain is delivered when SAS paramedics arrive to deliver early advanced life support (ALS). Achieving this requires more than 3 personnel to be present during the resuscitation so that CPR is not interrupted during ALS interventions. Current recommendations from the Association of Ambulance Service Chief Executives (AACE) states that to maximise a resuscitation attempt a minimum of 4 responders are required. Our partnership has ensured that there are now at least 6 responders attending OHCA in these communities.

Figure 2 - Chain of Survival



Training & Engagement

A partnership approach was taken to develop a high quality training package, which was tested and evaluated prior to implementation. Between December 2016 and April 2017 a total of 45 SFRS personnel in Mull and Oban were trained using the package. The training was delivered by SFRS trainers with quality assurance provided by SAS.

Common themes identified by the SAS were;

- Nervousness around dealing with DNACPR. This was dealt with by enhancing the training package to include the importance of when not to attempt resuscitation including the legal and ethical implications. Further to this we identified the need to ensure all responders received advice in dealing with the recently bereft.
- There was a high level of enthusiasm noted amongst the teams in relation to the opportunity for joint training and exercising which could be taken forward to real time incidents.
- SAS senior managers learned a lot about the unique challenges faced by those who work in the remote and rural locations in relation to response times, resource availability and distances to either definitive or specialist care.
- SAS trainers noted an overwhelming sense of enthusiasm and community resilience in the responders' enthusiasm and determination to do the 'right thing' in their own local communities.

Appendix A outlines some of the comments and feedback from SFRS and SAS instructors following the training and feedback from Oban and Mull SFRS station manager

A key driver of this project was early engagement with stations participating in this work. This included face-face visits by SFRS project team and SAS staff. The formation of the internal OHCA Steering Group and the SFRS local senior manager (LSO) as well as local delivery groups enabled two-way communication which included clinical governance and patient safety discussions and engagement with participating stations. This also facilitated opportunities for feedback and improvements to be made to operational procedures. A document library was compiled and a dedicated online resource being made available through the OHCA site on SFRS intranet site.

The SFRS used Citizen Space consultation hub for staff at participating stations to provide feedback on the trial on the following questionnaire categories;

- role and location
- information
- training
- operational response

- welfare and support

Although a relatively low response rate (19%) was received, it was overwhelmingly positive. LSO's provided the OHCA Steering Group with a contextual report endorsing the positivity for participation in national OHCA trials. The report allowed us to harness lessons learned to maximise our work.

Simulation Work

The simulation, exercise "Little Bay" was commenced at 11:29 on Monday 22nd May in Oban. This resulted in a real-time response. A formal debrief of the simulation was conducted afterwards. The event data from the defibrillator was downloaded and analysed and the team members wore body cameras to record the exercise. Footage from the body worn camera is attached in a separate document as appendix number 4.

Analysis of the data suggests that both organisations can effectively task their respective resources, provide good quality resuscitation, and work effectively together as a collective co-responding team. The data also shows rapid dispatch of SAS resources within less than 1 minute of the call commencing, but has highlighted a potential area for improvement with the dispatch of SFRS which took approximately 3 minutes. Work is on-going to improve this. The overall quality of CPR provided by the SFRS crews was excellent. 12% of the chest compressions delivered to the casualty had incomplete recoil (chest compression and recoil are equally important to empty and refill the heart). Future training of personnel will be revised to ensure greater focus on this aspect of the delivery of care. (See Appendix B for a download of the CPR data card).

Figure 3 shows some images from exercise little bay



In addition to the simulation data, we also sought to gather staff experience data from those who co-responded in the simulation exercise. This was done with the use of a data collection sheet and thematic analysis as outlines in table 2.

Table 2:

| | |
|-----------------------------|--|
| What did you like the most | <ul style="list-style-type: none">• Opportunity to practice skills and apply knowledge• Breaks down barriers between organisations• New learning• Aids communication |
| What did you like the least | <ul style="list-style-type: none">• Not knowing if DNACPR (do not attempt cardio pulmonary resuscitation) orders are in place• Unclear who leads a cardiac arrest event• Delay in turn out of responding vehicle |
| What could be done better | <ul style="list-style-type: none">• Constant noise from defibrillator is a distraction• The placing of equipment around the patient at a cardiac arrest event• Techniques to count 'breathes' |

The results of the analysis are being considered in order to further improve training.

As part of our OHCA co-responding work, we sought to capture a patient's story about their experience of an OHCA which resulted in a successful outcome as the gentleman survived to hospital discharge. Good news stories such as this have helped to close the feedback loop for staff, knowing that their efforts have resulted in a patient's survival.

The video via this link powerfully demonstrates the benefits that are being, and continue to be delivered by this successful partnership.

<https://vimeo.com/172116742> -

Word Count 1460

Part 3: Cost impact

Finance

The SAS and the SFRS are publically funded services in Scotland, with the co-responding efforts to OHCA being fully supported. The Community Resilience department manages a number of Community First Responder Programmes across Scotland which complements the work of SAS crews. Our OHCA co-responding work shows that the SFRS are also able to respond to OHCA incidents, which increases our response capability, thus impacting on response times. The costs of the co-responding service are utilising committed staff costs from SFRS with the ongoing training costs being met through SFRS resources.

Whilst there has not been an economic evaluation carried out on our work, the benefits from a financial view point are minimal. The costs for the SFRS and the SAS to implement an evidenced based delivery plan and roll-out to a wider range of locations, can be explained as outlined below applicable to the following categories.

- Training costs

The following table details the costs associated with the provision of required staff development.

| Role | Hourly Rate | 16 x hourly rate | Establishment | Costs by Role |
|----------------------------|-------------|------------------|---------------|-----------------|
| WMB | 16.78 | 268.48 | 1 | 268.48 |
| CMB | 15.01 | 240.16 | 2 | 480.32 |
| Ff | 13.53 | 216.48 | 7 | 1515.36 |
| | | | | |
| WMB TED | 16.78 | 268.48 | 1 | 268.48 |
| WMB TED* | | | | 210.00* |
| Sub-total plus | | | | £2742.62 |
| Inclusion of NI cont. etc. | | | | + |
| £12.79 | | | | £274.26 |
| Total | | | | £3016.88 |

- Operational Equipment and Consumables Costs

The following table details the costs associated with the provision of equipment per fire and rescue appliance.

| Item of Equipment | Cost |
|--|-----------------|
| Defibrillator | £1000 |
| Defibrillator Battery (periodic replacement) | £130 |
| CPR meter | £500 |
| Pulse Oximeter | £42 |
| Face Shields | £4 |
| Defibrillator Pads | £44 |
| Total | £1720.00 |

Approximate words: 186

Part 4: Learning from your project

The trial provided the following learning

Staff Welfare: Lessons Learned and Mitigating Factors Implemented

Responding to OHCA by SFRS personnel presented new challenges to the mental wellbeing of the involved crews. Specific concerns related to a potential significant increase in incidents resulting in fatalities, the close-proximity and exposure to grieving relatives and involved nature of the CPR in the attempted resuscitation of casualties. In order to mitigate and/or reduce this risk the following processes were implemented:

- Bespoke and specific input during the training module relating to dealing with sudden death and grieving relative
- A supporting presentation was added to the staff portal, covering all areas associated with sudden death such as legal, moral, social, religious and emotional considerations.
- An awareness briefing covering “*Do Not attempt CPR*” (DNACPR) orders and other situations when it would be appropriate for responding crews not to attempt resuscitation of a casualty.
- The use of the SFRS debriefs and operational review process to monitor, identify and address common themes or individual issues identified.
- Access to legacy Health and wellbeing support in line with the critical incident procedure where identified personnel receive a questionnaire to their home address, which may result in a follow up by a counselling and support service. Personnel can also self-refer to this service at any time. (On a periodic basis the SFRS receives a headline summary of uptake of this type of support as well as an annual report that looks to identify and share key themes and issues with the Service).

FBU Engagement and Challenges

This project required careful early negotiation and co-production between both organisations. A key strength of this projects success was collaboration and partnership working between the following key stakeholders; SAS, Fire Brigade Union (FBU), members of Scottish Government OHCA Delivery and Reference Groups, Save a Life for Scotland, Research Resuscitation Group Edinburgh, Her Majesty’s Fire Service Inspectorate and SFRS.

A joint communications strategy and set of key principles have been agreed and produced that form part of a document library on SFRS intranet site specific to the on-going project work for OHCA.

Underpinning the roll out of the trial work was the establishment of key forums on which staff (directly and through their representative bodies) could engage and feedback. In addition a dedicated SFRS intranet site and regular communications such as awareness briefings were used.

Supporting this, the following appendices are included

- Staff awareness briefing – Appendix 1C
- Terms of reference (OHCA Strategic Steering Group) – Appendix 1D
- Terms of reference (OHCA Local Delivery Group) – Appendix 1E
- OHCA FAQs for staff – Appendix 1F

Partnership Working and Notable Learning

The SFRS is an existing member of the fire service National Joint Council (NJC). Members agreed as part of this work that fire and rescue services would be able to submit expressions of interest to the Joint Secretaries to carry out trials arising from the work of the Emergency Medical Response workstream which could focus on co-responding. This included reference to broad consensus across all of the workstreams that a set of over-arching assurances would need to put in place in order to facilitate rolling out the proposed activities - for example provision of appropriate training and equipment (where relevant) and assurances around personal liability and pension issues. The principle of control staff involvement in mobilisation was also a factor. In order to facilitate such trials it was jointly recognised that such work will be regarded as part of the core job for the duration of the trial in each of the respective trial areas.

Notable Practice Case Studies

As part of fieldwork and ongoing involvement with NJC emergency medical response workstream trials the following Chief Fire Officers Association notable practice case studies were reviewed against SFRS projects in a number of English locations. It is envisaged that the SFRS would benefit from further exploring the approaches being taken to fire and rescue response to OHCA in the UK, Europe and Internationally. Finally, a key component of the partnership was a robust and suitable memorandum of understanding

The importance, benefits and future opportunities of collaborative working between the organisations is that both organisations embrace this partnership working. Since the project going live they have taken the principles of the OHCA project and applied it to other local collaborations. Local links between both organisations have been identified who liaise with each other to organise simulation drills, not only for OHCA management, but also other situations where they work closely together in real life incidents. As a result the staff report that they have a much better understanding of each other's roles and are finding they are working together even better than they already were whilst at these incidents. This project, and its collaborative working, is generating great interest and excitement from other parts of the country, where staff are expressing genuine interest in future roll out potentially coming to their area. Police Scotland have also been keen observers, and having seen these benefits are also expressing interest in become involved with expanding this cross service joint training.

One of the key learning points for us as a project team is the importance of local staff

engagement. We underestimated the importance of us as a team engaging with both organisations and relied too heavily on others to disseminate the information for us. Our focus was towards the SFRS staff members, probably to them being the focus of the training. This was to the detriment of not enough project team engagement with SAS staff within the area, resulting in them having some misunderstanding of the project at the point of it going live. However this was easily rectified with some awareness provided by the project team, but for future roll out we will absolutely ensure staff from both organisations are fully briefed from the outset by having a robust communication strategy. We will also look to develop innovative tools to aid communication such as training videos and frequently asked questions documents. The outcome of the staff (pre-trial) survey is included as an appendix and a further post-trial survey is planned. Feedback from some involved with the training is attached as appendix A. The staff SFRS staff survey is attached as appendix G

Word Count 1037

Part 5: Sustainability and spread

Spread & Sustainability

Feedback received from both organisations' Strategic Leadership Team and Boards concluded that further development and expansion would be supported where it was underpinned by an evidence-based approach. It is appropriate, in advance of the commencement of roll-out work, that consideration is given as to how to effectively prioritise any future spread in order to maximise impact. Specifically, when considering potential sites for delivery, that the merits of targeting remote and rural communities or densely populated urban centres are given significant and measured consideration. Based on the evidence from the project along with lessons learned we have been able to demonstrate that this approach offers both organisations a sustainable model of co-responding to OHCA which can be successfully spread.

Data gathered and lessons learned during the trial, have informed the process for selecting sites for an expansion of response, giving rise to the inclusion of the following factors in selection:

- SAS Ambulance response times in identified areas
- Specific areas and locations where ROSC rates do not exceed 12%
- Survival rates
- Reducing inequalities to remote and rural locations
- Areas of high OHCA incident concentration
- Resources available to be deployed to an OHCA (based on current activity)

Initial SAS analysis has identified 44 response locations where ROSC rates for OHCA incidents (all rhythms) were recorded as less than 12%. The following options make recommendation for the prioritising of developing, up-scaling and enhancing the collaborative response in these locations:

Option 1 – Prioritise Urban Whole-time Duty System (WDS) stations

Focussing on SFRS WDS stations and considering areas of dense population, this approach would identify a range of stations across Scotland where personnel could be quickly up-skilled to respond to OHCA incidents due to the accessibility of WDS personnel for training.

Potential benefits of this approach include rapid up-skilling potential, likely high call volume due to their siting in densely populated urban areas and ongoing capacity to maintain skills due to WDS personnel's greater weekly time allocation for training.

Option 2 – Prioritising Remote and Rural (predominantly Retained Duty System (RDS) and Volunteer personnel locations

Developing SFRS RDS stations for response, this approach is consistent and supportive of the Scottish Government OHCA Strategy, specifically reducing inequalities.

Potential benefits of this approach include the consistency with the strategic driver, the likelihood that SFRS response in these areas will enhance the highly demanded

existing SAS response and an opportunity to engage crews in potential lifesaving activities within the communities in which they live and work.

Option 3 – A selective response focussing primarily on the locations where SAS response times have the opportunity to be enhanced

This approach would see the targeted development of SFRS response stations in areas where current SAS resources available for response are limited and OHCA ROSC rates are lowest.

Potential benefits of this approach include the likelihood of meeting the evidence-based approach criteria and (potential) initial prioritisation of areas where maximum impact can be achieved. It will mean a range of both WDS and RDS stations will be included in the initial tranche of development work. It should be noted that the options proposed are predicated on two assumptions:

- That ultimately all 44 locations identified will be developed to have an SFRS OHCA response; the prioritisation element simply identifies which stations will be targeted first for development.
- That following endorsement of a methodology, further work will be undertaken to develop a delivery plan with key milestones and appropriate timescales.

Delivery and achievement of the outcomes associated with the above options are contingent upon the availability of supporting resources and fiscal provision. The positive outcomes associated with this project so far have identified the opportunity to spread this work as business as usual; however it is not without challenge. The SAS managers involved in the development of the existing trial recognise that supporting the amount of SFRS personnel training required for national roll-out is not achievable within the current available resources. Organisational strategic leads are currently negotiating the most effective and efficient way to achieve further spread and sustainability.

Word Count 674

Appendix 1A: Feedback from SFRS and SAS instructors and SFRS station manager

'Working with and training the SFRS in resuscitation skills was an incredibly enjoyable experience that presented challenges for both me and the fire fighters that neither side anticipated. With highly skilled individuals being asked to detach themselves from their usual mind-set and to think like a Paramedic and not a fire fighter was no doubt a challenging exercise. Each member of the SFRS that I worked with welcomed the training and gave 100% of their time and attention and was without exception, keen to learn and to extend their skills.'

Mr Craig Henderson, OHCA Trainer & Stroke Clinical Effectiveness Lead (SAS)

The collaboration between the Scottish Ambulance Service and Scottish Fire Rescue in the approach to responding to Out of Hospital in rural areas has been a positive step forward. The enthusiasm seen by students during the delivery of training was unprecedented. This project will enhance the outcome of patients experiencing out of hospital cardiac arrests.

Murray McEwan, National Community Resilience Manager (SAS)

"I feel the two day course is a sufficient time scale to deliver the course content. The interaction with the SAS personnel is of great benefit to the crews as they are advised first-hand on the correct techniques and procedures to adopt whilst assisting them at an OHCA incident.

I think it is very important that we refresh the crews training at regular intervals to maintain their high standards.

The joint training exercise with the SAS crew at Oban was very well received and helped build the fire crews' confidence in dealing with OHCA incidents.

I agree with Derek's opinion on the potential OHCA training roll out to the other outlying islands in our area. I know from personal experience that this would be well received and would be of great benefit to the island communities.

I have thoroughly enjoyed delivering this course, overall this has been very well received and the feedback from the crews has been very positive."

Michael Buckley (Watch Manager and SFRS trainer)

Feedback in general from personnel who have been involved in the role out is very positive – they have enjoyed the training, the interaction with SAS and are happy to undertake the duties in support of their communities as; on the whole, they understand the challenges faced by SAS. Iona Volunteers were very vocal in their desire for as many of the Station to be trained as possible in order to support local first responders as there is no ambulance or resident Doctor on the Island so these

would have to attend by ferry.

Oban Whole-time Watches have responded to a number of OHCA incidents and have therefore had direct interaction with SAS at these events and there has been an excellent approach taken by SFRS and SAS crews in order to feedback following incidents, arrange familiarisation visits to Oban Ambulance station and to ensure that each partner can contribute as fully as possible. Following the delivery of training to all 5 watches and the SAS/SFRS exercise there has been additional information from local crews (both at incidents and in debriefing) to refine the SFRS procedures to be as supportive as possible of the SAS role and ensure a clear understanding of what SAS require – this has refined the process to ensure SAS crews can focus on their monitoring and interaction with the patient while SFRS continue CPR and breaths given the greater number of personnel. Oban Red Watch has attended 4 OHCA with all patients leaving the scene alive, but unfortunately died later in primary care. The joint approach taken by SFRS and SAS in Oban is truly excellent and is down to the openness of both parties through debriefing, familiarisation and a willingness to work together for the best possible patient outcomes and I can genuinely say that I'm proud of what is being achieved by my crews here.

There are learning points and issues to overcome and these are around the mobilisation protocols where there is still some delay and to some extent potentially a lack of familiarity via the Control rooms, but I believe that some additional feedback has been provided to SAS Control from Oban SAS crews which may assist in resolving the issues. I also had feedback from one of my crew on Iona (who was already a first responder there) to tell me that the advice line number provided is the same number first responders use to book on and off duty – he raised concerns that when using that number before he and other first responders on Iona have had to wait 5 to 10 minutes to get through and that there can be a lack of continuity in calls as each call goes to whomever is available to take it, so he has raised his concerns that if the same number is being used for the advice line when attending operational incidents it has the potential to be an issue. I'd add however that I have had no feedback on this from operational crews who have attended incidents but this may be because SAS have either been in attendance or arrived soon after therefore the medical advice line hasn't been used.

I most certainly believe that there is the potential to increase the roll out to other islands as originally requested by NHS Highland e.g. Jura, Islay, Colonsay, Coll & Tiree and I know my staff will be happy to assist in this as soon as we are given the permission to progress with it – the Stations were advised some time ago that they were on the roll out list and feedback from Area Trainers following that initial information is that the Stations eagerly await it.

I believe that the model at Oban will continue to improve due to the positive interaction and debriefing which is taking place but given the more remote nature of the Mull and Iona roll out there may not be that continuous contact so a more proactive approach will be required to ensure positive and planned interaction.

Longer term an issue we may have to monitor will be changeover of staff on Volunteer, Retained and WT Stations – already at Oban I have 7 members of staff spread across 4 Watches (new trainees and transfers in) that haven't had the

training so there will be an ongoing requirement to run multiple 2 day courses or likely incur OT in delivering a course to catch the majority – hopefully there will be a method of covering the cost as you'll be aware of the increasing focus on OT at the moment.

On the whole Garry an incredibly worthwhile project of which I can see the genuine benefits in Oban as to date this is where the operational response in support of SAS has taken place. Despite a lack of incidents on Mull and Iona I have no doubt that there is a great benefit to be had particularly around the remote Ross of Mull and arguably more remote Iona.

Derek Wilson, Station Manager - Service Delivery/LSO Area TED Liaison| Argyll & Bute, East & West Dunbartonshire|

Appendix 1B



Q-CPR Report
Card_Coresponse sir

Appendix 1C



AB-Out-of-Hospital-C
ardiac-Arrest-V2.pdf

Appendix 1D



Terms-of-Reference-
OHCA-Strategic-Ste

Appendix 1E



Terms-of-Reference-
OHCA-Local-Delivery-

Appendix 1F



FAQ-update---Septe
mber-2016.pdf

Appendix 2: Project finance

Finance

Please provide a financial summary showing spending against your Innovating for Improvement award budget. Upon receipt of a satisfactory report, we will authorise and release your next payment.

This section should be completed and signed off by your finance department. You should report against the exact budget that was signed off in your award agreement using the template below.

We understand there may be variations to the originally agreed budget. Please let us know where this is the case, explain any significant variations and clarify the impact that this has had on the project.

Please highlight any underspends and how you plan to use this money eg for dissemination purposes. Note that we will only authorise your underspend with prior notification and where the reallocation will benefit your original project aims.

Budget template




Health Foundation
Final Budget Report.xlsx

Commentary on variations to the budget

N/A

Authorisation from finance department

| | |
|--------|---|
| Signed |  |
| Name | Duncan Keith |
| Role | Senior Management Accountant |

Appendix 3: Feedback to the Health Foundation

This is your opportunity to feedback to the Health Foundation about any aspect of your involvement in the Innovating for Improvement programme.

There is no obligation to provide any comments but we would welcome your thoughts on:

The learning events were of extremely high value. Being able to learn from other projects from a variety of different organisations gave a really broad insight into different ways in which we could provide quality improvement to our work.

The support consultant relationship was excellent. We developed a very informal relationship which allowed for suitable and sufficient support which was readily available. We engaged in regular teleconferences and review of interim reports provided a useful support process.

Contact with THF / access to wider Health Foundation resources was readily available and we appreciated all the support provided to us both during the application and subsequent award and project work.

The working relationship between key partners to this delivery (SAS, SFRS and Edinburgh Resuscitation Research Group) continues to be a key positive in the implementation. Lessons learned through the project have been applied elsewhere too.