South East Coast Ambulance Service NHS
NHS Foundation Trust

SUMMARY OF THE RSM INDEPENDENT REVIEW REPORT INTO AMBULANCE QUALITY INDICATORS

1. Introduction

1.1 This report provides a summary of an independent review into Ambulance Quality Indicators as they were applied at South East Coast Ambulance Service NHS Foundation Trust.

1.2 The full report is currently being taken through the Trust's internal process. The scope of the review is set out at **Annex A.**

2. Background

2.1 Ambulance Quality Indicators (AQI) were introduced in 2011/12 to deliver a set of metrics to indicate the quality of service delivered by an ambulance trust and evidence on-going service improvement.

2.2 Criteria for the reporting of ambulance response time performance are set out by NHS England in the Ambulance Quality Indicators (AQIs). These are reviewed annually but had not actually changed for some years. We note that on 23rd December 2015 NHS England published a revised set of metrics which took effect from 5th January 2016. These have not been considered as part of this review.

2.3 The Association of Ambulance Chief Executives (AACE), the representative body for all English ambulance services, provides additional guidance on interpretation of AQIs, to ensure they improve the consistency of application across all ambulance trusts. AACE issued guidance in February 2014 to all ambulance trusts and then again in July 2015.

2.4 The following is the only relevant section of the AQI guidance to the review. It sets out the 'clock-stop' requirement for a Red 1 (8 minute response).

The "clock stops" when the first ambulance service-dispatched emergency responder arrives at the scene of the incident. A legitimate clock stop position can include the response arriving at a pre-arrival rendezvous point when one has been determined as appropriate for the safety of ambulance staff in agreement with the control room. For example, a rendezvous point could be agreed for the following situations:

- *Information has been received relating to the given location that the patient is violent and police or other further assistance is required.*
- *Information has been received that the operational incident because of its nature is unsafe for ambulance staff to enter.*

For the purposes of the Category A (Red 1) 8-minute standard, an emergency response may only be by:

- *An emergency ambulance; or*
- *A rapid response vehicle equipped with a defibrillator to provide treatment at the scene; or*
- *An approved first responder equipped with a defibrillator, who is accountable to the ambulance service; or when a healthcare professional is at the location of the incident, equipped with a defibrillator and deemed clinically appropriate to respond by the trust.*
- *A Public Access Defibrillator with fully trained individual present, at the incident location.*

2.5 The same wording is used for Red 2 (8 minute response).

2.6 The AQIs in this area are largely unchanged since their origination in 2011. The only major revision was the separation of Category A into Red 1 and Red 2 in 2012.

2.7 The two critical issues with respect to Public Access Defibrillators (PADs) are the need for a fully trained person and the definition of the incident location. There is no clarification about the meaning of 'the incident location'. However, the common standard used by all ambulance trusts allows that an ambulance is considered to be at the incident location if the Automatic Vehicle Logging System registered within a 200m radius of the location.

2.8 The AACE guidance issued in February 2014 gave further Clarification (Section 14.2) that PADs by their nature are for use by bystanders who do not have previous training (as per final bullet point above). Advice on its use can be provided live by the Emergency Control Room during the incident. PAD's should be registered on the Ambulance Service Command and Control systems and can be geo-fenced for information purposes, but the Emergency Control Room should not automatically book PADs on scene as a response. The Emergency Control Room must clarify the response by confirming the caller is prepared to use it.

2.9 The AACE guidance issued in July 2015 recommended that these calls may be zeroed if confirmation is received that the PAD has been obtained and is immediately available for use at the location of the patient. This means that the call time call on the system can be recorded as zero even if the ambulance subsequently arrives after the 8 minutes target.

3. Summary Report and Conclusions

3.1 The review considered all aspects of the way the Trust applied guidance from NHS England and AACE.

3.2 The Data Validation Procedure used by all EOC that was ratified by the RMCGC on the 6th November 2012 explains how Web defibrillators should be retrospectively applied. This would have breached National Guideline at the time of approval, although there is no evidence that this was specifically discussed at the meeting or that there was any particular focus on defibrillators at the meeting.

3.3 A procedure was developed by the Trust in March 2014 which was applied from 1st January 2014 to 16th November 2015. This procedure retrospectively applied defibrillators within 200metres with the following exclusions:

- R1's
- R2's for unconscious & chest pain dispositions
- Hospitals
- Prisons

- Barracks
- Euro Tunnel
- Gatwick Airport
- RNLI Stations
- Surgeries
- Motorway Service Centres

An email from Chief Executive on 13 March 2014, to all those mentioned on the 12th March 2014 email which stated *"I have discussed this with the exec team and can confirm that we can authorise the use of known public access defibs (referencing email 12th March 2014)."* We have not been provided with the executive team approval of this change in process for Operating Instruction 111 dated 7th November 2013. In addition no further Operating Instruction was issued to staff clearly explaining this change in practice. (Para A8.1)

3.4 The Association of Ambulance Chief Executives produced a report on their peer review audit of Ambulance Quality Indicators Compliance which was sent directly to the Chief Executive of the Trust. The review could not find any evidence that this report was presented to an executive/governance committee within the Trust or that an action plan was put in place regarding the recommendation made within the report.

3.5 An incident report number W16893 was submitted via the IWR – 1 system regarding an incident that occurred on the 24th March 2015. This raised a question over the practice of applying retrospective Web defibrillators.

Procedural Guidance

3.6 The review of the procedural guidance in place at the Trust confirmed that Operating Instruction 111 was compliant with the Ambulance Quality Indicators Guidance issued originally in 1st April 2011 and revision made up to 31st August 2013 and the subsequent Guidance issued on 14th February 2014. The original guidance stated *"A PAD with a fully trained individual present at the incident location"* and the revised guidance (14th Feb) stated the same but gave clarification *"PAD by their nature are for use by bystanders who do not have previous training. The Emergency Control Room must clarify the response by confirming the caller is prepared to use it"*. The review *notes however, that despite the compliance of the Guidance testing identified inconsistent application of the guidance.*

3.7 Additionally, the interim measures put in place and discussed in the report were not compliant with the AACE 2014 Ambulance Quality Indicators Additional Guidance.

Data Analysis and Testing – 2014/15 AQIs

3.8 RSM asked the Information Department to run a report on all R1 & R2 incidents for the complete financial year where Web defibrillators had been applied to the incident. The report identified 5610 (22 R1s, 5588, R2s) such cases which were applied. RSM found that when a web defibrillators is retrospectively applied by EOC Information Staff or EOC Manager (at the time) there were no independent validation checks in place/performed to ensure the retrospective application was correctly applied and met the Trust guidance at the time:

- RSM tested the 22 R1 calls and found the following:
- All PADs were retrospectively applied

- For 3 calls the ambulance arrived within the 8 minutes and the PADS were added retrospectively as within the same building (2 at Hospitals and 1 at a Residential Care Home)
- 3 calls confirmed within the call log that a PAD was at the location of the incident but these were private defibrillators that were used and this was subsequently recorded on the CAD by ticking Web defibrillators applied. (e.g. Private Ambulance, Event) The remaining 19 calls had no mention of a PAD being obtained
- 1 call confirmed a PAD was not at the Residential Care Home. However, the Trust called back the home later and it was confirmed there was one at the home for use but the staff member was unaware; they have subsequently been informed.
- All Calls were made by someone other than the injured party. Therefore the patient was not home alone.
- All PADs applied to the calls were available, accessible and not being used at another location.
- This is the following breakdown to the site location:
  - 12 were in the same building (7 Residential Care Homes, 4 Hospitals and 1 Golf Club)
  - 2 were as a result of a call back to confirm a PAD was located in the same building
  - 2 calls related to the PADs being at the location of the incident
  - 6 were applied with the 200m Radius rule. Recognising the risk associated with such patients we checked these calls further and found that all patients were transferred to hospital and did not die prior to the transfer to Hospital care.

3.9 Therefore, 6 Web defibrillators were incorrectly applied according to Operational Procedure 111. These relate to the 6 PADS entered within a 200m radius. Additionally, if one was to apply Operating Procedure 111 to the letter, only 4/22 had evidence on the CAD that a PAD had been discussed and therefore should have been applied.

3.10 RSM sample tested 50 retrospective applied Web defibrillators in 2014/15 year end that were R2 calls and found the following:

- In all cases there was no mention of a PAD in the call. The Web defibrillators were incorrectly applied according to Operational Procedure 111.
- The report states that it could not verify that 6 people were not home alone from the systems available. Although the remaining 44 calls had evidence that a patient was with someone else at the scene, it does not take account of the person's capability and therefore it was presumed everybody is capable of collecting the PAD from the location applied.
- One PAD was wrongly applied due to the fact at the time of the call the site where the PAD was located was closed and not available.
- One PAD applied did not record the location and therefore we could not verify whether it was within 200m or at the site of the call
- All other PAD applied (48) were either within 200m or located at the site of the call.

3.11 Therefore, the Web defibrillators were incorrectly applied according to Operational Procedure 111. There was also misapplication of the Interim Procedure.

Review of System – 1 November – 17 November 2015

3.12. As there are few R1 calls made, RSM requested a report to show the number of these types of calls for the period 1st November 2015 to the 15th November 2015 and this identified that 153 R1 calls were made. With retrospective checking by Information Manager - East it was

identified that there was 1 instance where a PAD was retrospectively applied. This was the only Web defibrillators added for an R1 classified call during the period. This was checked and found the PAD was added wrongly as the location differed and was not within a 200m radius. In addition, there was no mention of a PAD in the Call, thereby not complying with Operating Instruction 111.

3.13 As there are a greater number of R2 calls made, a report to show the number of these types of call on one single day was requested .The day selected was the 1st November 2015 and the report identified that 112 R2 calls were made on that day. With retrospective checking by Information Manager - East it was identified that 25/112 instances had no mention of a PAD in the call. The Web defibrillators were incorrectly applied according to Operational Procedure 111

3.14 RSM found that in the case of all PADs which had been retrospectively applied, the patient had someone with them, the PAD was accessible, available and not being used on another call.

Review of Current System in Operation since 17th November 2015 (B8)

3.15 RSM asked the Information Department to run a report on all R1 & R2 incidents since the 17th November 2015 when a new directive came into force where Web defibrillators had been retrospectively applied to the incident. The report identified 42 such cases. RSM sample tested 10 calls and noted the following:

- All PADs were retrospectively applied
- The Ambulance breached the 8min target
- There were 2 calls where the PAD was mentioned and at the scene but was not ticked on the CAD to stop the clock.
- All Calls were made by someone other than the injured party. Therefore not home alone.
- All PADs applied to the calls were available, accessible and not being used at another location.
- The breakdown of the location found all the PAD to be in the same building of the incident (1 shop, 1 Custody Suite, 1 Doctors, 1 Holiday park, 1 Hospital and 5 Residential Care Home)
- All Calls were R2s

3.16 Based upon the elements set out above, RSM were satisfied that the requirements were in place to allow the Web defibrillators to have been applied retrospectively. However, these should still have been formally referenced within the call logs but were not for 8 out of the 10 sampled.

3.17 RSM concluded that whilst Operating Procedure 111 could be seen as complying with good practice based on the best available national guidance at the time, this was not consistently applied at all times and in particular there remains an issue with capturing all required information in the call log to provide suitable audit trail to demonstrate compliance.

4. Conclusion

4.1 As a result of the RSM independent review an action plan has been agreed and is attached at **Annex B.** This is being implemented.

Annex A

Scope of the review

To evaluate the adequacy of risk management and control within the system and the extent to which controls have been applied, with a view to providing an opinion. The scope was planned to provide assurance on the controls and mitigations in place relating to the following risks:

Objective of the risk under review	Risks relevant to the scope of the review
There are clearly set out Ambulance Quality Indicators (AQI), which are designed and applied at South East Coast Ambulance Services NHS Foundation Trust in accordance with national and agreed local guidance.	Failure to apply AQI as intended could mislead the Board and stakeholders and give a false impression of performance.

When planning the audit, the following areas for consideration and limitations were agreed:

Areas for consideration:

- The policies in place around AQI and whether these take account of the AACE Guidance and highlight any system weaknesses identified;
- Compliance with policies – we will review the mechanisms in the Trust for determining compliance with the policy, initially through assessment of the EOC Information Team processes: we will document these and compare to what was described in the report entitled PAD Contribution to Performance from the Chief Operating Officer;
- We will review the underlying data used for the 2014/15 AQIs;
- We will seek understanding of the data validation processes, as well as conduct sample testing to confirm suitability of application of policy and reporting of performance – these will include samples from across the three EOCs. Any initial observations in the variability of performance will be highlighted.
- Based on the findings we will highlight any discrepancies between our results and the Briefing paper entitled 'PAD – Contribution to Performance', as drafted by the Chief Operating Officer.

Limitations to the scope of the audit assignment:

The following limitations applied to the scope of our work:

- The review whether policies are complied with in each instance – all of our work will be undertaken on a sample basis.
- In addition, our work does not provide any guarantee against material errors, loss or fraud or provide an absolute assurance that material error, loss or fraud does not exist.
- will provide assurance over the effectiveness of systems in place for the Ambulance Quality Indicators. It will not provide an opinion on:-

ANNEX B

Categorisation of internal audit findings	
Priority	**Definition**
Low	There is scope for enhancing control or improving efficiency and quality.
Medium	Timely management attention is necessary. This is an internal control risk management issue that could lead to: Financial losses which could affect the effective function of a department, loss of controls or process being audited or possible reputational damage, negative publicity in local or regional media.
High	Immediate management attention is necessary. This is a serious internal control or risk management issue that may, with a high degree of certainty, lead to: Substantial losses, violation of corporate strategies, policies or values, reputational damage, negative publicity in national or international media or adverse regulatory impact, such as loss of operating licences or material fines.

The table below sets out the actions agreed by management to address the findings:

Ref	Findings summary	Priority	Actions for management	Implementation date	Responsible owner
1.	The Data Validation Procedure used by all EOC was ratified by the RMCGC on the 6th November 2012. On Page 15 Appendix 8: CAT A Defibs within 200m it explains how Webdefibs should be retrospectively applied. This instruction were based on the process that was in operation before Operating Procedure 111 dated 14th November 2012 was issued stating the Trust was not complying with National Guidance. It was never amended to reflect these changes and it next review day was November 2015. Also we note in the steps contained within this there was no mention to validate that the EOC Call Taker had mentioned that a PAD was at the patient's side	High	Any future changes to the process should be reflected clearly in the Data Validation Procedure and approved immediately by the RMCGC and/or the committee for overall responsibility for Performance. This procedure as a matter of prudence should be reviewed on an annual basis by the RMCGC and/or the committee with overall responsibility for Performance. **Management Response** Agree with the principle. Given the very recent new AQI guidance it is suggested that a new Data Validation Procedure is developed to rebase AQI reporting in line with the new NHS England guidance. It is also suggested that the responsibility for this approval should sit with FBDC. Guidance will be developed. AQI procedure to be completed and ratified by both commissioners and FBDC by the end of February	29th February 2016	Lead Manager Alex Klumpers

Ref	Findings summary	Priority	Actions for management	Implementation date	Responsible owner
2.	The Corporate Information, Data Quality and Protection Manager emailed the Chief Executive, Director of Clinical Operations, and Director of Corporate Affairs with a report entitled "Potential Factors effecting current R2 Performance. Within the Report it states the following: "Whilst undertaking the analysis one area that came to light was the impact of the use of webdefibs. We were not provided with evidence this report was presented within the Trust Governance Committee structure to demonstrate it was identifying potential causes of falling operational performance or any formal action or change of process took place as a result of this report	High	On key data definitions where there might be an impact on service delivery or something that is likely to have a material impact on performance based upon interpretation. This should be clearly communicated to all board members via the monthly performance reports and in the first instance approved by the Finance and Business Development Committee (FBDC). Where externally generated, approval may not be necessary as it may be obligatory for the Trust to comply with an externally imposed requirement. **Management Response** Agreed – changes to reporting, whether internally generated or externally generated should be discussed with FBDC with a clear audit trail for approval where required. Initial pass to be covered by the new AQI procedure due to be approved by the end of February	29th February 2016	Lead Manager Alex Klumpers
3.	The Association of Ambulance Chief Executives produced a report on their peer review audit of Ambulance Quality Indicators Compliance which was sent directly to the Chief Executive of the Trust. Its main finding relating to this review was that SECamb apply 200m geofence to PADs for Red 1 incidents for information purposes only. For Red 1 incidents a PAD will only stop the clock if the PAD is with the patient.	High	All future external reports on Data Quality should be presented to RMCGC or the relevant committee or Board as appropriate along with paper describing how each of the recommendations within the report will be implemented or not within the organisation. This should also include what impact the changes will have both to patient safety and performance.	30th April 2016	Lead – Brian Courtney

Ref	Findings summary	Priority	Actions for management	Implementation date	Responsible owner
	We could not find any evidence that this report was presented to an executive/governance committee within the Trust or that an action plan was put in place regarding the recommendation made within the report. The Chief Operating Officer confirmed that this was the case		**Management Response** Agreed – All external reports commissioned by the Trust from a competent body should be submitted to the relevant committee/Board for consideration and any recommendations considered.		
4	The RMCGC Report (A17) contained two recommendations but a decision was not made on either of these recommendations according to the minutes. The email (A18.2) above then mentions the RMCGC had agreed option 1 and took this forward.	High	It should be made clear in all future committee papers where a decision is required, that it is taken at the meeting and this is clearly recorded within the minutes so that this can be disseminated through the organisation and so there is a clear record of decisions requested and taken. **Management Response** Agreed – Work is underway to address this within RMCGC and the associated working groups CQWG and OGWG.	30th April 2016	Lead – Lucy Bloem
5.	Email from Chief Operating Officer to Executive Directors and associated staff stating the original Policy issued in November 2013 should be applied with immediate effect. Please cascade with EOC teams the need to ensure compliance with Operating Instruction 111 as it has never been revoked so we need to ensure that it is being applied properly across all EOCs and teams. In addition it stated "However one matter that has become clear relates to an interim procedure put in place in 2014 (March). At the time the Operating Instruction	High	(a) The Trust should ensure compliance with Operational Instruction 111 uniformly across the EOCs. (b) The Trust should ensure that the new AQI procedure is compliant with new AQI guidelines. (c) The Trust should ensure that a clinically appropriate instruction is issued in the light of the new AQI guidance. **Management Response** **Agreed**	30th April 2016	Lead: Rob Mason

Ref	Findings summary	Priority	Actions for management	Implementation date	Responsible owner
	(111) required that a call taker made somebody aware that the defibrillator was available. Because of issues with the CAD which meant that the caution notes could not always be relied on an interim measure was put in place allowing the application of a defibrillator if certain tests were applied including availability, capability and location." (see Para A18)				
6.	To ensure the system was working correctly we created three test cases on the CAD (False callout jobs) to confirm the caution notes appeared. The results were as follows: • An Incident at Willingdean Golf, Eastbourne where we had knowledge that a PAD exists was correctly displayed to the EOC Call Taker via the caution notes. • An incident at street within 200m of Willingdean Golf Club was selected and again the CAD correctly displayed to the EOC Call Taker that a PAD was located at Willingdean Golf Club. • We also put through an incident at the Amex Football Stadium but no caution notes were displayed informing the EOC Call Taker that a PAD existed within 200m of the incident. Further investigation found that the Database used to record the PAD did not include any of the ones located at the Amex Football Stadium.	High	Management to determine a process to ensure all PADs can be identified for use at the point of call. **Management Response** We will undertake a technical review to determine how this can be achieved, recognising the potential patient safety implications. This review will cover the defibrillator database held by volunteer services and the different ways in which defibrillators are recorded in the CAD as well as looking at constraints in the number of records that can be held by the CAD.	30th April 2016	Lead James Kennedy

Ref	Findings summary	Priority	Actions for management	Implementation date	Responsible owner
7.	We asked when a webdefib is applied retrospectively by the EOC Information Team who in the Trust validates that it has been correctly applied and in accordance with the stated criteria. We were informed that no validation checks are made on these types of changes/entries.	High	The Trust should ensure that sample checking is undertaken going forwards to provide assurance over the quality of the information where judgements are required to be applied, such as around the application of retrospective defibrillators. **Management Response** Will consider as part of response to new AQI Guidance.	31st March 2016	Lead Alex Klumpers
8.	Throughout the testing we have seen inconsistent application of both the Operational Procedure 111 and the Interim Procedure which was in place at the Trust.	High	Once appropriate guidance has been drawn up for EOC staff and the EOC Information Team there should be clear training to support them in ensuring its consistent and appropriate application. **Management Response** Agreed	31st March 2016	Lead Alex Klumpers