

External Investigation into the NHS 111 Call Management Partition at South East Coast Ambulance Service NHS Foundation Trust (Red 3/Green 5)

Document Title: External Investigation into NHS 111 Call Management Partition Pilot Project at South East Coast Ambulance Service NHS Foundation Trust (Red 3/Green 5)

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The National Health Service Commissioning Board was established on 1 October 2012 as an executive non-departmental public body. Since 1 April 2013, the National Health Service Commissioning Board has used the name NHS England for operational purposes.

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1 Glossary of terms

3TC	Commercial IT company which supplied Computer Aided				
010	Despatch System				
AACE	Association of Ambulance Chief Executives				
AH	At Hospital				
AQI's	Ambulance Quality Indicators				
BAF	Board Assurance Framework				
Band 4, 6, 7	NHS Job Banding Grade				
CAD	Computer Aided Dispatch				
CareUK	SECAmb's NHS 111 provider partner				
Cat C 30/60	Non Urgent Calls that will receive a response within 30 or 60				
	minutes				
CCGs	Clinical Commissioning Groups				
CCP	Critical Care Paramedic				
CCR time	Core Connect Response time (5 second pick up)				
COSG	Clinical Operations Sub-Group				
CQC	Care Quality Commission				
CQRG	Clinical Quality Review Group				
CQWG	Clinical Quality Working Group				
CS	Clinical Supervisor (Band EOC clinician)				
CWG	Compliance Working Group				
Dispatch	When vehicles are sent to incident				
Dispatcher	EOC Member of Staff who actually dispatches the vehicles				
Distribution Silver	Second in command in the EOCs				
DoS	Directory of Services				
Dx Codes	Codes in NHS Pathways used to denote patient disposition				
EMA	Emergency Medical Advisor				
EMATL	Emergency Medical Advisor Team Leader				
EOC	Emergency Operations Centre				
EOC Line	Recorded line in Emergency Control Centre				
EOCSP	Emergency Operations Centre Senior Practitioner (Advanced				
	Clinical position recruited to for the pilot)				
Francis Report	Report into patient safety in Staffordshire				
FT	Foundation Trust				
Gold Officer	First in command of the trust for untoward incidents				
GP	General Practitioner				
Green	Non urgent calls				
HALO	Hospital Ambulance Liaison Officer				
Handover	Time at hospital when patient is handed from the ambulance				
	crew to the hospital staff				
HART	Hazardous Area Response Team				
Healthcare	Registered clinicians on the NMC, HCPC or GMC registers				
Professionals					
Hear & Treat	Treatment is given over the phone and not in person				
IC24	Out of Hours Provider				
IR1 or IWR1	Incident report from a SECAmb member of staff				
KMSS	Kent, Medway, Surrey and Sussex				

KPI	Key Performance Indicator				
LAS	London Ambulance Service				
Monitor	The Foundation Trust regulator				
NHS 111	Often used as a shorthand generic term for both management				
	and service provision in this area				
NHS 999	Often used as a shorthand generic term for both management				
	and service provision in this area				
NHS Pathways	The computer diagnostic system				
OP&GWG	Operational Performance & Governance Working Group				
OSDG	Operational Strategic Delivery Group				
Partition Call	111 R2 calls reclassified as R3				
Activity					
PP	Paramedic Practitioner				
R1 or Red 1	Red 1 Category of Calls – predominantly cardiac arrest				
R2 or Red 2	Red 2 Category of Calls				
REAP	Resourcing Escalatory Action Plan				
Risk Summit	Formal risk assessment				
RMCGC	Risk Management and Clinical Governance Committee				
SCAS	South Central Ambulance Service				
SECAmb	South East Coast Ambulance Service NHS Foundation Trust				
See & Refer	Patient seen by a healthcare professional and referred on for				
	further treatment				
See & Treat	Patient seen by a healthcare professional and treated at				
	scene				
Stack	Colour coded list of 999 calls on the screen in the Emergency				
	Operations Centre				
SI	Serious Incident				

2 Executive summary

The pressure and demand on all ambulance trusts across England in the winter of 2014 was unprecedented. South East Coast Ambulance Service NHS Foundation Trust (SECAmb) was concerned about their ability to safely provide a safe service to their patients identified as having life threatening illness as well as those who were severely ill.

In December 2014 SECAmb implemented a project to change standard operating procedures and to re-triage the Red 2 (R2) dispositions sent from the NHS 111 service to the ambulance 999 service. These R2 patients were relabelled Red 3 (R3) and allowed an extra 10 minutes for clinical triage to occur before an ambulance was dispatched. A similar process was applied to the Green 2 (G2) dispositions being sent from NHS 111 to 999 and these were allowed an extra 20 minutes for clinical retriage.

An increase was identified in demand for ambulances via the NHS 111 service, which caused significant peaks and troughs and affected the trust's ability to safely deliver the commissioned 75% R2 dispatches within 8 minutes, thus affecting the overall performance.

Phase 1 pilots from the NHS 111 Learning and Development work streams had identified that many Green calls identified by the NHS111 call handlers using Pathways were not necessary; up to 60% could be directed to a different provider service by clinicians and no ambulance was needed. In August 2014 SECAmb carried out a similar pilot project using Paramedics to re-triage calls which was deemed to be successful (however there was no formal evaluation of this pilot) and an executive decision was made to roll this out to include R2 calls as well, to help ease winter pressures.

The R3/G5 partition project was set up under the auspices of the Operation and Service Delivery Group (OSDG). It was one of several work streams being managed by members of this group. An arbitrary decision to allow paramedics an extra 10 minutes to triage the NHS111 R2 calls was approved by members of the OSDG but there was no formal approval from the Trust Board or from the lead commissioner.

This investigation has identified that the R3/G5 project had significant deficiencies in many aspects.

- The project was not suitably managed. There was no formal project initiation
 process nor a clear evidence based project plan. There was no stakeholder
 engagement, no financial planning, and no formal approval by all the
 executives or board. There was no timely data collection and evaluation, with
 no risk assessment and limited risk management.
- 2. Communication with the commissioners was poor and no written agreement was sought to deviate from nationally agreed standard operating plans. Due to the poor project management there are no clear audit trails.

- 3. Oversight of the governance processes involved within the project is difficult to understand due to ad hoc decision making and lack of formal documentation. The project was aimed solely at the R2/G2 calls being received from the NHS 111 services (and not the 999 calls), but no formal engagement or communication was made with the NHS 111 service affected, despite both services being provided by SECAmb.
- 4. The CCG never received any formal papers requesting agreement to the initiation of the project. It was mentioned in a meeting on 3rd December 2014 but no further clarification was given by SECAmb nor sought from the CCG at this meeting. A further indication of the confusion surrounding this project is the fact that, despite the CCG alleging to have had no knowledge of it occurring, they did mistakenly submit an invoice to NHS England for £101,000 for this project which was paid. This money sits unspent in the NHS Swale CCG account. The R3/G5 project proposal was not approved by the Phase 2 L&D committee of the NHS 111 central team. SECAmb did not present the project formally when invited to do so by the L&D team as they could not agree a governance process suitable for such a project.

Post project the provider have worked diligently to produce a comprehensive report investigating the project and identified significant incidents. However it is noteworthy that some key documents had to be specifically requested several times before they were produced.

Summary

The R3 /G5 partition pilot may have been instigated with good intentions, but due to lack of due diligence, good governance and board leadership it was allowed to proceed without effective risk management. Despite executive directors acknowledging that many of the processes involved in the project were inadequate, there was a distinct lack of accountability. No conclusions can be made as to the safety and efficacy of the project, which is disappointing as the learning may well have helped urgent care communities across England.

3 Introduction

This is an external investigation into understanding how the R3/G5 call partition project was initiated and then implemented. R2/G2 calls from NHS 111 were sent to a queue, called the R3/G5 partition, to await a clinician to be available to undertake a second assessment and to check that an appropriate ambulance response had been assigned. The clinician could increase the urgency of the call to a higher priority, or could keep the call at the same priority, or change the priority according to the care needs of the patient. The organisation set a time limit of 10 minutes to re-triage the R2 calls and 20 minutes for the re-triage of G2 calls.

The <u>South East Coast Ambulance Service NHS Foundation Trust</u> is a statutory body which was authorised by Monitor on 1 March 2011 under Section 35 of the National Health Service Act 2006. Monitor issued the Trust with an NHS Provider Licence in accordance with the Health and Social Care Act 2012 on 01 April 2013. Currently they have a green governance rating with Monitor declaring no evident concerns.

South East Coast Ambulance Service NHS Foundation Trust serves a population of 4.5 million across a geographical area of 3,600 square miles, covering Kent and Medway, Surrey, Sussex and North East Hampshire. The Trust was assessed by the Care Quality Commission in 2013 and was judged at meeting all the standards in October 2014.

Currently there are 22 Clinical Commissioning Groups (CCGs) who commission services from SECAmb. CCGs are clinically-led statutory NHS bodies responsible for the planning and commissioning of health care services for their local areas. The lead commissioner was NHS Swale CCG. The lead CCG had a role in monitoring the safety of the services provided and also the quality of the experience for the patients.

3.1 Terms of reference for the external investigation

The terms of reference for the investigation were set out by NHS England following a risk summit which was held on 31 March 2015. They were to:

- understand the context to the development of the pilot and system response to risk within urgent care services;
- detail the change to the clinical assessment and decision making across the care pathway and whether there was a change to evidence based operating standards during the pilot;
- find out what training and briefing was provided to staff ahead of the "go live" of the pilot;
- review the process for sign off of the pilot by commissioners and national NHS 111 leads:

- investigate how the pilot was communicated to partner urgent care services and mechanism for gaining feedback on the impact on services during the pilot;
- investigate how the pilot was communicated to patients using the service;
- understand how the service change was evaluated during and after the pilot to detect potential adverse consequences;
- review the governance and risk assessment process within the Trust before and as the pilot went live;
- analyse the incident reporting, escalation and clinical risk management during the pilot;
- review the investigation of incidents related to the pilot including clarification of potential and actual harm/death of patients. This will include patients who were conveyed to hospital as Red 2 cases and whether the delay they had experienced had any effect on their clinical outcome post hospital handover.
- review the communication and involvement of families in the Trust investigation;
- assess whether a "look back" should be undertaken of the incident reporting arrangements more generally within the Trust including risk thresholds and the patient safety culture within the Trust.

3.2 Evidence collection

The lead investigators reviewed approximately 400 documents, mapped the service operating standards before and then during the pilot, visited an Emergency Operations Centre and carried out 16 interviews with identified key individuals.

The investigators have not met with families and have not reviewed every single call that was subject to the pilot project as approximately 26 000 calls were transferred from NHS 111 for a NHS 999 ambulance dispatch during the duration of the pilot project.

4 Background/context

4.1 National context

Every year the NHS supports hundreds of millions of contacts from members of the public who need urgent or emergency care. The number of calls received by ambulance services has increased over the last decade from 4.9 million to over 9 million. In 2013 NHS 111 was launched for 'urgent but not life threatening' health issues and complements the long-established 999 emergency phone number. Nationally there are increasing numbers of the public making calls to NHS 111 services and winter pressures in the NHS come every year but despite planning the NHS faces considerable challenge during this period.

Every winter the demands on the ambulance service and A/E departments have been growing. In the winter of 2014/15 the largest numbers of calls ever made to the NHS 111 service were recorded. There were 1,398,166 calls in December 2014 which was about 45,100 per day, and of those NHS 111 calls receiving triage in December 2014, 11% had ambulances dispatched, 7% were recommended to A&E, 64% were recommended to primary care, 4% were recommended to another service, and 15% were not recommended to any service. In January 2015 there were 1,166,768 calls, or 38,000 per day. This was fewer than December, but larger than every other month since NHS 111 started. This shows the pressure the NHS 111 services were under with such high call volumes.

The latest NHS 111 follow-up surveys, for the half year ending September 2014, show that 17% of callers would have contacted the 999 ambulance service had NHS 111 not been available; it is a service requirement for NHS 111 services to be able to automatically send information electronically to ambulance services in the event ambulance dispatch is required. (Source: NHS England's Winter Health Check, 16th January 2015). However it was recognised that a number of calls coming from the NHS 111 service did not actually require an ambulance response and so NHS England have embarked on a programme of exploring and formally evaluating different NHS 111 service models. Phase one of the programme has finished and been evaluated. The outcomes of these pilots are being used to influence the next phase of the development of an enhanced NHS 111 service.

After the launch of SECAmb's R3/G5 project in December, January 2015 saw the publication of *Pilot 3 Clinical Assessment of Green Ambulance Disposition Evaluation* by NHS 111 Learning and Development Programme & GE Healthcare Finnamore. The conclusions were that:-

"The pilot evaluation has illustrated that there is a case for commissioners to consider including enhanced clinical assessment in their operating models. Conclusions about the safety and effectiveness of the disposition changes following clinical review are limited by the lack of outcome data. The limited data that was reviewed indicated that there was no adverse impact on clinical outcomes. However, further detailed work and ongoing senior clinical audit of calls is required to confirm the clinical safety and effectiveness of this approach."

4.2 SECAmb's urgent care system and the local context

SECAmb interfaces with 22 CCGs, 12 Acute Trusts, and 18 emergency departments and also there are additional specialist centres that patients are taken to. The Trust responds to 999 calls from the public, urgent calls from health care professionals and also provides NHS 111 services across the region of Kent, Medway, Surrey and Sussex (KMSS).

The service covers a geographical area of 3,600 square miles (Brighton and Hove, East Sussex, West Sussex, Kent, Surrey and North East Hampshire). They have over 3,500 staff working across 110 sites in Kent, Surrey and Sussex.

The NHS 111 services were launched in Kent, Surrey and Sussex in Spring 2013 and were provided on 2 sites at Ashford and Dorking (The Dorking site is subcontracted to Care UK to manage).

There are 3 Emergency Operating Centres (EoC) at Banstead, Lewes and Coxheath which provide the call handling for all their 999 calls and this is where the dispatch of ambulances required from the NHS 111 service happens. The Trust has seen a year on year increase in activity of 6.3%.

4.2.1 Why this project specifically?

Ambulance services are funded to meet their R1 and R2 ambulance response time of 8 minutes from dispatch to arrival on scene at a national performance target of 75% of the time (*Ambulance Quality Indicator (AQI) targets*). This means that 25% of the time there is a national acceptance that the target will not be met and so balancing the system to make sure that the critically ill are prioritised is essential to the service because time is of the essence for the critically ill. Nationally of the 25% of callers who did not get their ambulance in 8 minutes the next performance target is set that 95% should get an ambulance response time of 19 minutes. When demand for ambulances is high and the resource is low, due to too many people requiring them at the same time, being able to prioritise who gets the ambulances to improve their chances of survival is critical. Therefore we were informed that one of the aims of the R3/G5 project was to improve ambulance response times to critically ill patients requiring a Red 1 (R1) ambulance response time at peak times when the system becomes pressured.

G2 ambulance dispatch categories are for less time critical emergency situations which still require an ambulance response but the response times are set by the local commissioners. These had been set for SECAmb at a 30 minute response time.

Also there was a developing national picture of too many emergency admissions to hospital and some of these admissions could have been avoided. Nationally it was considered that 50% of 999 ambulance calls could be managed at the scene with no onward transfer to A/E; SECAmb therefore developed a strategy to try to deal with this situation through the appropriate use of "Hear and Treat", "See and Treat" and alternative pathways. The strategy was focused on providing the right care for the patient and in doing so reducing unnecessary hospital activity, which at peak times

was overstretched. Against this background within SECAmb's Operations and Strategic Delivery Group there was an operational plan to increase "Hear and Treat" and "See and Treat" targets within a specified work stream to assist with meeting their response times reliably.

Delays at hospitals were resulting in ambulance crews being unable to handover their patients to A/E departments. There is a national waiting time standard for ambulance handover of 15 minutes. For SECAmb during December 2014 handover delays of over 15 minutes had increased from 2013 by 50%. This resulted in lost ambulance time as ambulance staff are held waiting to handover their patients in hospital which then impacts other patients in the community as ambulances are not available to respond to their calls. We were also advised that it was usual for SECAmb ambulance staff to care for patients in corridors, called "cohorting", when they are unable to handover to hospital staff. Introduction of Hospital Ambulance Liaison Officers (HALOs) were employed to manage surges in activity to make sure handover delays do not happen.

SECAmb's 111 Call Management Partition Pilot (Red 3 Green 5) Report, produced for the Risk Management and Clinical Governance Committee in March 2015, states that SECAmb's NHS 111 conveyances to hospital were 20% lower when compared to NHS 999 conveyances to hospital. From this it was concluded that callers/patients who called NHS 111 services were generally less sick than patients who called 999.

In November 2014 SECAmb had put in an application to NHS 111 Learning and Development directorate for a project (project 70), similar to the R3/G5 project, which was submitted by the Director of Commercial Services. The Trust would have been given feedback about whether their project was a successful by early December 2014. However the trust did not present this pilot to the L&D NHS 111 committee so no approval was given for it to commence.

Within the documents we have been given, there was no detailed analysis prior to the R3/G5 project commencing that showed that the NHS 111 service was the cause of the pressure in the system. Without really analysing the problem the organisation then introduced the R3/G5 call partition into the 999 service. If the problem was with NHS 111 then the solution should have been found there. Redesigning processes so that problems are addressed at source should have been the right approach; if NHS 111 service was not performing then attempts to address the problem should have been aimed at this side of the service.

In summary it is clear that SECAmb were operating under extreme pressure. Adding in additional winter pressures in an exceptionally cold winter would take the service to its limits.

5 The R3/G5 partition pilot project

5.1 Project initiation

The Chief Executive in July 2014 established a task and finish group which was named Operations and Strategic Delivery Group (OSDG). Through the work of the OSDG the R3/G5 project emerged. However it must be noted that this was not a discrete individual project and because of this there is very little project documentation directly linked to this project. At this time the Trust had an operational delivery strategy with three work streams. One of these was focusing on reducing conveyances to hospital through appropriate use of "Hear and Treat", "See and Treat" and alternative pathways. This work stream was necessary because at peak times there were too many calls that required an ambulance response and there were not enough ambulance resources available and it was within this work stream, in a sub group, that the R3/G5 project developed.

5.2 Introduction of Paramedic Practitioners to the Emergency Operation Centre

This is a Trust that encourages its staff to be innovative and, as a result, in August 2014 through the "Hear and Treat" work stream 3 Paramedic Practitioners (PPs) were introduced to the EOC to see if they could do the same work as the General Practitioners (GPs). GPs had been employed to work in the EoC to re-triage calls to see if they really did require an ambulance or if a more appropriate care pathway could be found. The PPs were trained by the GPs and, when they felt confident, they started to re-triage calls themselves which they had "cherry picked" out of the call "stack" as possible calls that probably did not require an ambulance response. In these initial stages it must be noted that the ambulance had already been dispatched and so the re-triage process at this stage was not delaying an ambulance response.

Through the initial introduction of the PPs, it became apparent that sometimes, as the clinician was deciding that an ambulance response was not appropriate, the ambulance would arrive. The idea to give the clinician time to check that an ambulance response was required developed as a next step. There was an appetite to do this nationally and so from here the call partition process R3/G5 was thought to be a solution.

5.3 Stakeholder involvement

The lead commissioner NHS Swale CCG was aware of the intention the Trust had to re-triage green calls because of the national work going on. They did not see any project documentation for the R3/G5 project as there was no formal project documentation.

On 3rd December, before the project went live, there was a minuted note in the SECAmb 999 Contract Quality and Performance meeting stating SECAmb's R3/G5 project intentions, but the commissioners were not made aware of the additional 10 and 20 minute re-triage time.

5.4 The call partition

The R3/G5 project introduced change to nationally and locally agreed operating standards through a new system of an enhanced clinical assessment from clinicians, PPs or Clinical Supervisors (CSs), to all calls from the NHS 111 service into the 999 emergency control centres which had generated a R2 or G2 dispatch. The NHS 111 calls requesting a R2/G2 ambulance dispatch were put into holding queue. This queue was named the R3/G5 partition and allowed a 10 minute window to re-triage R2 activity and an additional 20 minutes to re-triage G2 activity.

In order that the NHS 11 calls could be partitioned into a queue, changes were made to the computer operating system. This work was commenced in September 2014 after the first PPs had been introduced. The R3/G5 computer system was built so that it could be switched on and off depending on the availability of clinicians to make call backs. The call stayed in the queue until the clinicians manually moved the call back.

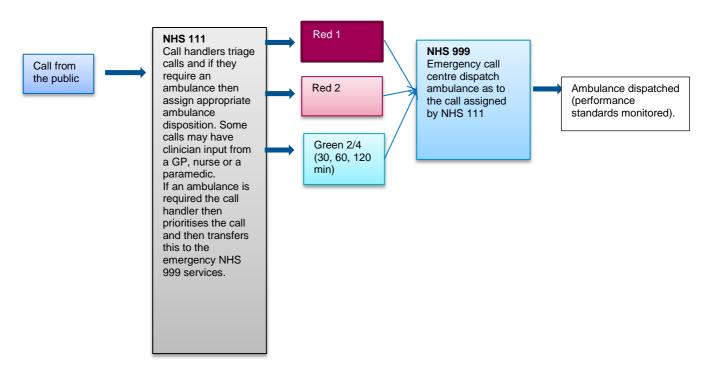
The initial date for the "go live" for the R3/G5 system was delayed by a week because of problems that needed solving with the computer system. From the documentation we have reviewed, the project was set to run for an initial period of 26 days (12th December 2014 – 6th January 2015).

5.5 National operating standards prior to project commencement

Calls from the public to NHS 111 are dealt with by trained health advisers, supported by healthcare professionals. The advisors ask a series of questions to assess the caller's presenting symptoms and then direct the caller to the right NHS service for them. The health advisors use a clinical assessment system called NHS Pathways. If an ambulance is required, the call is then passed from NHS 111 to NHS 999 services. The 111 service has 3 minutes in which they may ask for clinical oversight of the ambulance disposition before they must transfer the call to the 999 service. In the Emergency Operations Centre at NHS 999 the dispatchers then allocate ambulances to attend the callers. Ambulance response times are set and monitored nationally. NHS England NHS 111 Commissioning Standards (June 2014, page 12, point 3.2) state that:-

"NHS 111 must be able to identify potentially life threatening problems and dispatch an ambulance without any delay **or re-triage**, and support the patient prior to the vehicle arriving."

5.5.1 Diagram: representing national operating standards



5.5.2 National ambulance response times

Call	Ambulance response times
Red 1 (R1)	Presenting conditions which may be immediately life threatening and should receive an emergency response within 8 minutes irrespective of location in 75% of cases
	presenting (3 out of 4 people). 95% to be reached within 19 minutes.
Red 2 (R2)	Presenting conditions which may be life threatening but less time critical should receive an emergency response within 8 minutes irrespective of location in 75% of cases presenting (3 out of 4 people). 95% to be reached within 19 minutes.
Green 2 (G2)	Less serious incidents and response times are set locally by commissioners at 30 minutes.

5.6 Operating standards during R3/G5 pilot project

The first part of the callers' journey remained the same as calls from the public to NHS 111, and were dealt with by trained health advisers, supported by healthcare professionals. The calls continued to be assessed by the advisors using NHS Pathways, asking a series of questions to assess the caller's presenting symptoms and then directing the caller to the right NHS service for them. If an ambulance was required the call was then passed from NHS 111 to NHS 999 services.

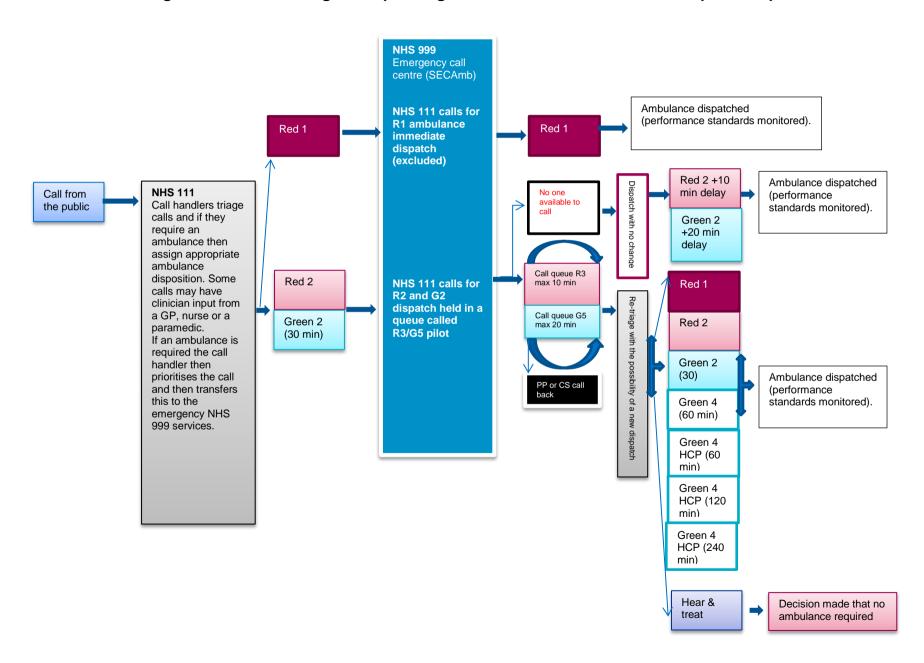
The change that this project allowed was that the NHS 111 Red 2 and Green 2 calls were placed in a call partition queue, which was called "Red 3/Green 5". The callers, who were expecting ambulances, were then called back by clinicians (re-triage) with the aim of possibly changing the care pathway. After this additional clinical assessment the clinicians then decided on the best course of care for the caller and for a second time decided whether an ambulance response was appropriate. Calls could be upgraded to a more urgent ambulance response, or remain the same, or could be downgraded to a less urgent response; some callers may not even need an

ambulance response at all. After this second clinical assessment the call was then sent to the dispatchers only if an ambulance was thought to be required. The dispatchers would then allocate ambulances to attend the callers. During this project ambulance response times continued to be monitored however this was not in line with national key performance indicators (some calls had gone into the call queue as R2 and were changed to hear and treat and so could not be monitored in the same way).

5.6.1 Ambulance response times with R3/G5 partition

Call	Ambulance response times	R3/G5 partition
Red 1 (R1)	Presenting conditions which may be immediately life threatening and	Excluded from
	should receive an emergency response within 8 minutes irrespective	this project.
	of location in 75% of cases presenting (3 out of 4 people). 95% to be	
	reached within 19 minutes.	
Red 2 (R2)	Presenting conditions which may be life threatening but less time	10 minute time
	critical should receive an emergency response within 8 minutes	to re-triage
	irrespective of location in 75% of cases presenting (3 out of 4	given
	people). 95% to be reached within 19 minutes.	
Green 2	Less serious incidents and response times are set locally by	20 minute time
(G2)	commissioners at 30 minutes.	to re-triage.

5.6.2 Diagram: SECAmb changes to operating standards for Red 3 Green 5 call partition pilot



5.7 Recruitment

At the end of November 2014 a job description and personal specification was refined developed for the PP role. Assessment and interviews took place on 5th December 2014. An additional 10 experienced PPs (Agenda for Change band 7) were recruited into the EoC from SECAmb's own staff and they commenced post in mid-December.

5.8 Training

There was an additional 1 day training for the 10 PPs before the project went live, as Paramedics were not trained in telephone call triage. We were advised that all the individuals seconded to the role were very experienced paramedics.

5.9 Clinical assessment of the calls within the R3/G5 call partition

When the R3/G5 process went live on 20th December 2014, the PPs used their clinical assessment skills to re-triage the calls and the CSs used the NHS Pathways system again with the caller to see if the call genuinely required an ambulance response or if an alternative plan of care could be put in place.

If there was no one available to re-triage calls within the allocated window (at 10 minutes for R3 or at 20 minutes for G5) an alarm would sound which would alert the clinician to transfer the call for an automatic dispatch to the original disposition from the NHS 111 service.

As an additional safety measure, the dispatch staff and all clinical staff were able to manually update any of these calls to requiring ambulance dispatch earlier than the above time limits (a manual dispatch decision). This would typically be decided upon based on the description of the emergency call or if it was reasonably believed that no clinician would be free in time to provide clinical review.

5.10 Governance

There were monthly governance days for the PPs, where their calls were reviewed by their peers and discussion about cases could take place. There was an intention to monitor clinical incidents, complaints and serious incidents.

5.11 Standard operating procedures for the call partition

A protocol called *Emergency Operations Centre Clinical Supervisor and Senior (PP / CCP) Practitioner Procedure*, dated as issued on 18th December 2014, was developed for the clinical staff to follow. The protocol states that it was signed off by the Director of Clinical Operations as Chair of Operational Performance & Governance Working Group on 17th December 2014. Information about the project was emailed to staff on 18th December 2014, two 2 days before the project went live.

The protocol explicitly states that "All Dispatchers will have full visibility of all 111 activities, but will not be expected to dispatch while 111 calls are within the agreed review timeframes."

Also that "NHS111 calls received from a Health Care Professional (HCP) should not be called back with the aim of downgrading the call. The patient and/or caller may be called back for welfare reasons, and if their condition has changed the call may be re-assessed or re-triaged (section 3.13.4)".

In this protocol there was one defined exclusion criterion:-

"In some cases, for example, where stroke symptoms are obvious, 111 calls should be dispatched on without delay, in consultation with EMATL staff, CS staff or indeed the EOCSPs (section 3.11)".

5.12 Communication strategy

The pilot project was communicated to clinical staff working in the 999 Emergency Operations Centres via an email sent to the EOC manager's generic inbox with a request to pass on to all clinical staff.

5.13 Start and close of the project

The project was commenced on 20 December 2014; the initial documents state that it was due to close on 6th January 2015 but continued. At this time the organisation was in Resourcing Escalatory Action Plan stage 4 (REAP 4) and also this was four days before the Christmas holiday period.

The system was switched off for less than 24 hours on the second week it went live as the workload was considered too great to safely re-triage the calls. After this time a decision was made to leave the system switched permanently on.

The R3/G5 project was closed by the Trust, on the advice of the commissioners, on 24 February 2015.

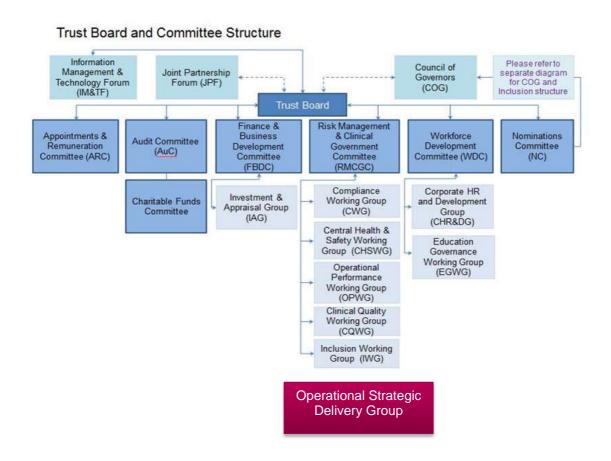
6 Investigation findings and commentary

6.1 Concerns with SECAmb's governance processes

The SECAmb Trust Board were not aware of the decision to carry out the R3/G5 project; through review of the Board minutes there is no documentation or updates that relate to this project prior to its commencement. None of the committees that report to the Board through the Risk Management and Clinical Governance Committees (RMCGC) had formal reports about the project prior to it commencing.

During the course of this investigation it has been concluded that the R3/G5 "project" emerged out of work streams that were commenced to improve SECAmb's operational performance within a working group called the Operations and Strategic Delivery Group (OSDG). Executive Directors and key members of the Clinical Operations team were part of that delivery group (see appendix 1). The group had a project brief and specific work streams. It must be noted that the Director of Nursing was named a member of the group but she was on sick leave during this time.

During the course of our interviews we were advised that the idea/decision to set up the NHS 111 R3/G5 call partition was at the OSDG. Executives were participants and key decision makers on this group. The OSDG had terms of reference for the group but had no reporting lines into any of the recognised governance committees. This meant that the project was initiated within a silo and that it had no governance checks. The Trust may have robust committees but this group was allowed by the Executives to operate outside them, which is of concern.



There are no minutes kept of any of the meetings for the OSDG and no attendance records. A simple spread sheet called an "Action Tracker" was used to structure the meetings and focus the discussions in the areas where decisions had to be made. Unfortunately these records were incomplete and actions were not followed up. For example it was stated that a "Governance paper" was to be written but this did not did not happen. The action tracker also states that the Medical Director was "not happy" with the inclusion of R2 activity but there is no follow on action; the Medical Director states that she was unaware of the project until after it had gone live.

In the terms of reference for the OSDG there were 3/4 main work streams defined and from the limited specific project documentation the R3/G5 project appears to emerge out of the "Hear and Treat" work stream. The action tracker had a section to record risks called a "risk log"; however there was no risk assessments undertaken for the R3/G5 work and so the risks of the project were never identified on the action tracker. This project was never entered onto the Trust risk register before it went live, despite the potential risk as the project was a clear departure from national operating standards.

We were told at the investigation interviews that a sub group of the OSDG took the "Hear and Treat" work stream forward and that there was executive input into the work stream. Some of the clinical managers leading the work assumed that there was Trust Board approval for the projects as there were Executives approving the main decisions. During the investigation interviews we were told by staff that during the development phase of this project they had expressed their concerns about safety to the Executives but they were reassured that this was the right thing to do. The executives also advised us that clinicians had asked for the project to continue and that there was a consensus to do so. The project was temporarily stopped on the weekend of December 27th by a senior manager (Silver Command) due to perceived lack of safety, the decision had executive support (Gold Command) but then after this the call partition was re-instated continuously with no formal evaluation of the risk was carried out.

We have concluded that there was a lack of project transparency and a lack of governance for this project because it was impossible to follow and understand the decision making processes. This means that we, as investigators, should have been able to clearly see how and why any project decisions were made and what information, advice and consultation processes were followed. We have found that the R3/G5 project just "emerged", as it was wrapped within the sub group responsible for the "hear and treat" work stream. There was no project management specifically related to this project as it was not identified as a separate project. The project management should have been participatory and so anyone affected by or interested in a decision should have the opportunity to participate in the process for making that decision.

Because of the lack of documentation and the lack of information provided at interview, we have not been able to understand who made certain decisions or if they were issues that had been considered. For example we don't know who made the decision:-

- not to tell the public their call was to be held in a queue
- not to tell NHS111 that 999 were going to re-triage their calls

- not to put in any metrics to evaluate the project
- not to close the project on the original date of 6th January 2015
- not to communicate this project to the rest of the Board
- to carry out project in 999 service when the problem was in SECAmb's NHS 111 service
- to leave the system switched on all the time when it was designed to be switched off when there were low staffing levels
- to have allowed a 10 minute re-triage time for R2 calls and to have allowed a 20 minute re-triage time for G5 calls
- to start a project at their busiest time of year when they had gone into REAP 4 and 5 days before Christmas
- to monitor the project by retrospective review of clinical incidents (that were only reviewed by an administrator with no clinical background).

On the 6th Jan 2015 when the R3/G5 project was underway there was a missed opportunity for the Executives to have told the Board of the project that was underway in their own EoCs.

"158. Questions from the public

158.1 NS asked the Board to make a public statement responding to the AACE (Association of Ambulance Chief Executives) proposals to make changes to response times, which had been leaked to the media and was of significant interest to the public and staff.

158.2 PS indicated that a proposal to make changes to response times had been considered by AACE and submitted to the Department of Health some months previously. The proposal had not been implemented across all Ambulance Trusts but was being piloted in a small number of areas. The proposed change would have given Ambulance Trusts up to three minutes to decide whether a call was a R2, and needed a response within 8 minutes. This was reasonable given that it could take up to three minutes to reach a disposition when using NHS Pathways to triage calls and would reduce the number of pre-alerts. Any cases that would deteriorate if they had to wait three minutes would automatically become Red 1 calls. PS' view was that as this proposal had not been introduced there wasn't a need for the Trust to publish a formal statement.

158.3 However SECAmb's commissioners had agreed the Trust could retriage certain ambulance dispositions from NHS 111 when under pressure"

The proposal that was put forward to the Department of Health was for a 3 minute retriage time and yet the re-triage time for R2s within SECAmb was for 10 minutes. It is of concern to the investigators that there was no transparency about the project to the Board when the time that had been chosen was 7 minutes longer than was put forward by AACE and the R3/G5 call partition was operational. SECAmb's CEO was a member of AACE and so was aware that the proposal from AACE had required Department of Health approval and yet the local R3/G5 proposal was not approved by SECAmb's Board.

We have concluded that key people and key committees within the organisation were not briefed, including the Board, in the way that would have been expected when the project had such potential risk for the organisation.

6.2 A missed opportunity to test the R3/G5 process

The introduction of PPs into the EoC room in August 2014 was a missed opportunity to have measured whether their presence and their clinical assessments were having an impact, as they were re-triaging calls when the ambulance was on the way. Also it was a missed opportunity to evaluate whether their triage skills actually did direct the caller to an alternative pathway or whether this just delayed events, as callers just called back. A formal evaluation would have supported the next phase which would have been the call partition. SECAmb could have also looked at the timeframes that it took to re-triage calls, so that a decision about the time frame was based on what was required in reality. An analysis of where the problems lay could have been undertaken to try and find out which calls were more likely to have been a wrong disposition (999, NHS 111 or both).

6.3 Lack of stakeholder engagement prior to the project going live

As the R3/G5 process project was not communicated to partner urgent care services there was no mechanism for gaining feedback of the impact for the whole system.

6.3.1 The public

The callers (the public) were not told that their call was put into a queue and so there is a lack of transparency with the public with this whole project. NHS 111 staff would have told them an ambulance was on its way, when in fact that was not true.

6.3.2 SECAmb's NHS 111 services

NHS 111 services do not appear in the briefings to staff before the R3/G5 project went live and so they were unaware of the re-triage process happening in the EoC. This may have impacted on the 999 staff being able to make "call backs", as the callers may have been still on the line to NHS 111 staff. We don't know who made the decision not to keep everyone informed within the Trust. The 999 and the 111 services appear to run as two separate services.

If there were too many ambulance dispositions from the NHS 111 side of the service then this needed to have been properly analysed and the problem should have been solved there. During the time of the R3/G5 call partition from the data we have been given by SECAmb, 15.5% (1486 calls) were re-triaged to a "Hear and Treat" and an ambulance was not required. However what we don't know is how many of these callers then called back as they were subsequently wrongly triaged in the EoC, as this was also not evaluated.

6.3.3 Lead CCG engagement

The Quality and Safety Team for the lead commissioners were aware of a proposal that the Trust had made to the NHS Learning and Development Programme phase 2 bids in November 2014 (project 70). Also there was an encouragement for the Trust to look at ways to re-triage green calls in line with the national recommendations. The CCG knew about the GPs doing "call backs" in the EoC.

The minutes of the 3rd December 2014 Quality, Performance and Contract meeting are interesting as they do describe the project. This was a missed opportunity for the commissioners to have asked SECAmb exactly what they were proposing and for any project documentation. The purpose of the R3/G5 process was described by SECAmb in the 999 performance section - "there is a lot of potential to convert the numbers currently going through to 111 general to hear and treat". The fact that calls would be put in a queue to await clinical assessment was also described "There will be no dispatch on a green call until it has gone through the system, they will instead be queued".

SECAmb advised their commissioners that they were going run the project until January "This new system will be in place until January so as to create a large amount of data to base decisions on."

The meeting notes go on to state that "There are a number of 111 red 2 calls that could be made into green calls or hear and treat **and these will be triaged**". This shows that there was an intention to re-triage red calls and because of the risk involved "the clinical staff will be band 7".

Also the minutes go on to say:-

"The change will be audited and reviewed in January; if it is successful it will be used permanently at certain times. The system can be turned on and off so it can be used as and when it is needed. This could reduce the activity that goes through to 999; this may potentially be available to expand to 111 in the future. Friday the 12th of December through to Tuesday the 6th of January is the period that the system will be in place."

The commissioners present at that meeting did not challenge SECAmb for more information at this stage. We have reviewed these minutes and as we understand the R3/G5 process this was the project that was being described. SECAmb did not highlight that they were changing operating standards and they did not explain the fact that they were adding a 10 or 20 minute re-triage time. The notes have an action to see if 999 can refer to the Out of Hours (OOH) services but there was no follow up action for the commissioners to find out more about the project.

We are concluding that SECAmb did verbally explain the intention to re-triage calls but important information was missing. As no objections were raised by the CCG the SECAmb representatives assumed that this was acknowledgement/approval for continuance with the project. It was our view that it was not appropriate for permission to be sought and gained verbally for such a significant change to the contracting standards, in such an informal way. NHS England NHS 111 Commissioning Standards (June 2014, page 12, point 3.2) state that

"NHS 111 must be able to identify potentially life threatening problems and dispatch an ambulance without any delay or re-triage, and support the patient prior to the vehicle arriving."

SECAmb's contract was in line with the national standards and, as the 10 minute time frame was not mentioned for R2 calls, the commissioners were not aware of the full picture and risks before the project went live.

On the 12th January SECAmb 999 Contract Quality and Performance meeting it was stated that there was increased triage but again the call queue was not mentioned. "Hear and Treat activity was more in line with plan this month but had been underperforming previously. There is increased triage in 999 from 111 calls which may be driving this".

On 3rd February 2015 the lead commissioner NHS Swale CCG made contact with the Trust for more information on the R3 process, as a Serious Incident had been logged onto the system relating to an ambulance delay. This was the start of the commissioners trying to understand the governance processes around the project. Over the next 21 days there were many requests to the Trust to share their R3/G5 project papers, governance arrangements and risk assessments. NHS Swale did a lot of work analysing clinical incident data, requesting and analysing the call data and the complaints data. SECAmb were not able to easily extract their data from their system and this added to the delay in understanding the picture of whether this system was or was not having an impact on clinical care. It must also be noted that there was only 1 serious clinical incident reported at this point.

On 17th February 2015 the CCG's Quality and Safety team visited SECAmb's NHS 111 call centre at Ashford and the EoC at Coxheath. The commissioners identified many risks and they remained concerned of the risks of the 10 minute re-triage time. They were also concerned that, when the PPs were not present, the CSs were retriaging calls in addition to their roles.

When more serious clinical incidents came to light the lead commissioners on 23rd February 2015 requested that the Trust suspend the R3/G5 process, which SECAmb did on 24th February. It took 21 days for the commissioners to review the situation and then advise SECAmb to close the project. It must also be noted that SECAmb could at any point have stopped the pilot and did not need to wait for the commissioners.

6.3.4 Lack of communication to urgent care providers

We have not been provided with any evidence that any external Trusts or providers were given any information about the R3/G5 project and so were not involved in any evaluation.

6.3.5 Lack of internal SECAmb staff consultation

SECAmb clinicians do not appear to have been consulted with before the R3/G5 project went live. Within a draft paper that was submitted to the investigators as evidence, it stated that several of the Clinical Supervisor staff submitted a grievance to the organisation alleging a failure to engage, consult or involve CS staff. This may have been prevented if the project had been properly consulted on.

Key senior people were unaware of the project, such as the Head of Compliance, staff at the NHS 111 call centre and the Medical Director. The Nurse Director was off sick at this time with no interim replacement.

6.4 The risks of the call partition

The R3/G5 holding queue allowed a 10 minute window to re-triage R2 activity and an additional 20 minutes to re-triage G2 activity and yet the timeframe put forward by AACE to the Department of Health was 3 minutes. We have been provided with no details about how the respective figures of 10 and 20 minutes were decided upon or the risk assessments around how those figures were decided. This meant that some callers were subject to a planned delay regardless of whether there was an ambulance resource available to them.

There were approximately 26,000 calls made in the period of the project, but we do not know yet how many callers never had a call back and so no additional clinical assessment because there was no clinician availability. This would have meant that the caller had an additional 10 minute wait which may have impacted on their clinical condition. When the ambulance crew arrived on scene, we are still uncertain whether they knew to report through the clinical incident system if someone had had an additional 10 minute wait and whether this had impacted on their clinical condition, as this was not part of the protocol/instructions to staff. No risk assessments were undertaken to understand the impact on a waiting Red call while the clinician was actively dealing with a Green call.

The system was built so that it could be switched on and off depending on the availability of clinicians to make call backs. The system was switched off once on the weekend of 27th December because of the lack of availability for the clinicians to do call backs. After this time an executive decision was made to leave the system on all the time. We have been told that the rationale for this decision was that clinical staff felt that it was safer to leave the system on all the time, however this was not evaluated.

The CSs and PPs used different methods to re-triage calls and we do not know if this had an impact as NHS Pathways had already been used. We don't know if the CSs (Band 6) or PPs (Band 7) were more or less successful at re-triaging the calls and appropriately changing the ambulance disposition, as the project was not set up to measure this.

The call back/second clinical assessment could not happen if NHS 111 staff remained on the line (as they would do if they had to give advice if a worsening situation); as they were not aware of the project then they would not have known to have cleared the line to allow for the second clinical assessment. The call back could also not happen if the caller used their own phone in that time to inform family and friends what was happening to them, as they did not know there was a possibility of a call back and second assessment.

The clinician could manually move the calls out of the partition queue but we don't know how many times that this was done. There were instructions in the protocol that stated "All Dispatchers will have full visibility of all 111 activities, but will not be expected to dispatch while 111 calls are within the agreed review timeframes." This is of concern. We don't know if the dispatchers used their initiative and moved calls out of the call partition queue or if they waited until the clinicians manually did this.

There was a reliance on the clinician manually moving the call from the R3/G5 process when the time for re-triage timed out (10 minutes or 20 minutes) and an

audible bell rang and so there may have been even further delays if this was not acted upon.

There were peaks and troughs to the numbers of calls that required call back. We heard that sometimes the volume of call backs meant that calls had to be left with no call back, as there was no capacity. This is also of concern as the clinicians had to manually switch the call out of the R3/G5 queue, which may have had an impact if they were busy on another call and could not carry out the switch.

The project was set to run for an initial period of 26 days (12^{th} December 2014 -6^{th} January 2015) but it continued to run until it was closed after 66 days. We do not know who made the decision to continue with running the project after the initial project time and what data there was to support this decision, as there were no project controls.

6.5 Concerns about recruitment

Paramedic staffing was on the Trust's risk register and yet 10 experienced PPs were recruited into the EoC from SECAmb's own staff. The impact of moving the practitioners from being out in the field to the EoC has not been measured.

6.6 Concerns about the training

The experienced PPs had one day training to enable them to be able to carry out telephone triage and to use the CAD system. The calls that they were dealing with already had an ambulance disposition assigned to them and so the purpose of their call was to assess the clinical condition to see if an ambulance disposition was really required. We were told of at least 2 PPs who left the project as they found it too stressful.

The caller was not expecting someone to call them back and they were already expecting an ambulance, so the calls had to be handled very sensitively. Telling someone that they are not getting an ambulance when they were expecting one could have triggered many complaints. The calls had already been through NHS Pathways and so the caller may be wondering why they were repeating all the information again to another person, as they were not aware of the intention of the second clinical assessment.

The training pack we were given did not highlight any of the risks of the project. It also did not advise the PPs about who to report their concerns to about the new system.

A further significant concern is the fact that when a specially trained and recruited Paramedic was not available the Clinical Supervisor was expected to undertake this role whilst also managing their normal duties. There were no extra support sessions for these individuals and no governance processes incorporated into this aspect of the service.

6.7 Concerns about escalation, clinical incident reporting and complaints

As the Governance Committees and the Head of Compliance were unaware of the R3/G5 project, there was no increased surveillance of clinical incidents and complaints during the project period.

6.7.1 Escalation of concerns about the R3/G5 project

Before the project commenced senior managers voiced their concerns to Executives about the risks of delay to the individual patients.

On 23rd December 2014 the Head of Compliance was contacted about concerns with the new R3/G5 system by one of the CSs; before this time they were unaware of the R3/G5 process. When they made enquiries about the system they were advised that the project was to be closed in early January and so they made no further enquiries.

After the project started, the Medical Director was made aware of the R3/G5 process and, as the project was underway, made no further enquiries about the process.

On 17 February through SECAmb's whistle blower email address an anonymous whistle blower raised their concerns about the R3/G5 project and this was responded to by the CCG appropriately and led to the incident reporting system being reviewed which uncovered further concerns.

6.7.2 Clinical incident reporting

During the course of the lead CCG attempting to find out what the R3 process was, they were advised that the review of clinical incidents (IR1 or IWR1) was reliant upon a non-clinical administrator. We were advised they did not know about R3/G5 process so would not have been looking for incidents and escalating them. They were also responsible for highlighting any clinical incidents that needed escalating to the Executives as Serious Incidents, and yet they had no clinical background. We have been advised that this process has changed and a senior clinician is now responsible for the review of all incidents reporting onto the system.

In the first week there were concerns raised through the clinical incident reporting system about the re-triage system by the clinical supervisors. They were re-triaging calls that had already been through NHS Pathways system and yet they were using the same system again. They had not received additional training, they were not getting any additional pay, and yet they were carrying out the same role as the PPs.

6.7.3 Complaints

Туре	Red 3 calls	Green 5 calls	Totals
Complaints	5	6	11

The analysis of the complaints has not been provided to the investigators.

6.7.4 Serious clinical incidents

Туре	Red 3 calls	Green 5 calls	Totals
Serious incidents	7	2	9

At the time of writing this report not all the clinical incidents have been investigated and so we have undertaken detailed review of 7 serious incidents that have been made available to us.

It must be noted that the patients were unknowingly affected by the R3/G5 partition project. As far as we have been made aware the families were not involved in the investigation process and were not interviewed. The families were told by SECAmb that an investigation was being undertaken but at the outset they were not told of the of the R3/G5 call queue.

Each SI is summarised below:-

• STEIS 2015/6145 SECAmb assessment: SEVERE harm In this SI the patient's representative called the services 4 times in total. The first call resulted in an R2 disposition being sent to the 999 service, which was placed in the R3/G5 partition queue at 10:02 and re-triaged back to a Red 2 disposition at 10:11. The ambulance then arrived at the scene at 10:18. The patient was left at home on a "See and Treat" basis. A further call resulted in the patient being advised to contact their GP within 3 working days. A third call was designated an R2 by NHS 111 and transferred to the 999 service at 20:11. A clinical supervisor called the patient back at 20:20 to be told the patient had died.

The outcome was not, in our opinion, affected by the call partition process.

• STEIS 2015/6674 SECAmb assessment: LOW harm An R2 call from NHS 111 was sent to the 999 service at 01:53. At 01:56 a second health advisor contacted the 999 service to alert them to the need for a patient with breathing difficulties to have an ambulance. He was placed in the partition queue but not re-triaged. The ambulance was dispatched at 02:01. This patient was left at home as a "See and Treat" patient. A second R2 call was sent from NHS 111 to the 999 service at 21:59. This was placed in the partition clinical queue. At 22:03 tried to re triage but was unable to contact the patient as the NHS 111 service had not cleared the line. Re-triage was managed at 22:06 and the patient had collapsed so CPR was advised was started. The ambulance arrived at 22:08.the patient died.

There was no effect on clinical outcome due to the call partition process, as the ambulance arrived 9 minutes after the call arrived at the 999 service.

STEIS 2015/7632 SECAmb assessment: NO HARM
 An R2 call from NHS 111 arrived at the 999 service at 23:47 and placed in the partition queue. The call was re-triaged at 23:51 and the patient had agonal breathing and needed CPR. 999 stayed on the line until the ambulance crew arrived at 23:57. The patient died.

The re-triage process allowed CPR instructions to be relayed to the care home so in fact offered an earlier clinical intervention and might have improved clinical outcome.

STEIS 2015/4127 SECAmb assessment: MEDIUM HARM
R2 call generated by NHS 111 to 999 services at 01:42. Placed in partition
queue but was not clinically re-triaged so a manual dispatch occurred after 10
minutes. An ambulance was assigned at 01:52 but not mobile until 01:57.
 Crew arrived at scene at 02:17. A relative had been doing CPR alone until this
time. The patient died.

The delay due to the call partition project was 10 minutes. Had a clinician in fact spoken to the patient's relative the clinician would have recognised the mistake made by the NHS 111 call handler and upgraded the response to the correct R1 disposition and the dispatch of an ambulance may have been quicker. This was a missed opportunity for the project to have improved a clinical outcome.

- STEIS 2015/13062 SECAmb assessment: NO HARM Call at 20:58 to Health advisor in NHS 111 arrived at G2 ambulance disposition. At 21:14 the relative of the patient, an 8 day old baby, declined an ambulance so, as per protocol, the call was "warm transferred" to a clinician within the 111 service. The clinician upgraded the call to an R2 call and transferred it to the 999 service at 21:18. Despite the exclusion criteria for this project stating that clinically triaged calls should not be placed in the partition queue, this call was. The clinician in NHS 111 was so concerned about the patient that they decided to stay on the line and support the caller whilst the ambulance was dispatched. At 21:26 the clinician advised the 999 service that they were offering this support. An ambulance dispatch was finally agreed by a clinical supervisor at 21:27. There was a 9 minute delay due to the partition process. The clinical outcome of the 8 day old baby is not documented in the Trust's RCA.
- STEIS 2015/11353 SECAmb assessment: LOW HARM
 R2 call to 999 from NHS 111 at 10:22 which was placed in the partition queue.
 Re-triage occurred at 10:28 and the R2 disposition agreed and upgraded back
 at 10:29. The patient arrested at 10:46 and the paramedic arrived at scene at
 10:51 and started ALS. In the 6 minute delay waiting for re-triage back to the
 same ambulance disposition, resources were no longer available that had
 been available at the time of the NHS 111 call transfer. The delay is unlikely to
 have affected the clinical outcome of death from pulmonary embolus.
- STEIS 2015/11488 SECAmb assessment: NO HARM

R2 call sent at 08.16 from NHS 11 to 999 services. Symptoms were suggestive of a stroke so **should NOT have been allowed into the partition queue** by the exclusion criteria set for the project. However the patient was put in the queue and was upgraded back to an R2 call at 08:27, 11 minutes after the call was received, with no further triage. Dispatch was at 08:27 and crew arrived on scene at 08:43. The trust determined that the delay had no effect on the clinical outcome as thrombolysis was not required due to resolving symptoms within a 4 hour window.

Conclusion

The 7 identified SIs relating to the R3/G5 partition project that the investigators received highlight the need for real time data collection and risk management of the project. The Trust's reliance on a look back exercise months after the incident had occurred is not an appropriate or safe method of project evaluation.

The exclusion criteria for the project were not clearly documented or obviously clinically evaluated. In the investigators' opinion, neonates and children under one year old should not have been included in the project. This patient had been triaged by a clinician in the NHS 111 service and so should not have been included in the partition project anyway.

At least one patient with stroke symptoms was also included in the project in error.

Three of the SIs showed the partition project had no effect on the clinical outcome of the patient.

One SI revealed that if clinical input had occurred through the re-triage process in a timely manner a significant error on behalf of the NHS 111call handler might have been corrected and an R1 disposition for a myocardial infarction arrived at.

The final SI did show some possible benefit to the patient through the re-triage process by a clinician, as CPR instructions were given whilst an ambulance was en route.

6.8 Concerns with the R3/G5 protocol for the call partition

A document called *Emergency Operations Centre Clinical Supervisor and Senior (PP / CCP) Practitioner Procedure* for the R3/G5 process, completed on 17th December 2014, was offered as the project initiation /advice document.

We have not had any emails to show that it was issued to staff and we are not certain of the clinical consultation process for this document. However, when the commissioners went to visit Coxheath EoC on 17th February 2015, they were advised that there was no written protocol for the R3/G5 process. Only an email was issued to the EoC staff only on 18th December 2014, which was two days before the project went live and the process for the R3/G5 calls was within that email. The Medical Director was not aware of the protocol yet she had responsibility for clinical governance. The protocol was signed by an Executive Director, by chair's action, and

so was not seen by any of the governance committees that might have challenged the R3/G5 process.

The protocol explicitly states that "All Dispatchers will have full visibility of all 111 activities, but will not be expected to dispatch while 111 calls are within the agreed review timeframes." This statement is of concern as the dispatchers may have seen clinical concerns that required earlier dispatch, but did not act because of this statement.

We were not reassured during the course of our investigation that the protocol was adhered to and that all the calls that already had a health care professional input within NHS 111 were not re-triaged and given a different ambulance disposition.

"NHS111 calls received from a Health Care Professional (HCP) should not be called back with the aim of downgrading the call. The patient and/or caller may be called back for welfare reasons, and if their condition has changed the call may be re-assessed or re-triaged. (Reference Section 3.13.4)"

When the Commissioners reviewed the computer system, the NHS 111 originator (health advisor or clinical advisor) could not be determined on the R3/G5 queuing screen but could only be determined on entering the clinical details screen.

We know that the project criteria excluded anyone who had stoke symptoms, but we were advised that unless this was really clearly stated on the R3/G5 queuing screen the callers were still called back, as this again could not be seen until the clinical details screen was entered.

In the London Ambulance Service (LAS) protocol for the review of green calls the exemption criteria were extensive. The same thoroughness of thinking regarding which patients should and should not be included does not appear to have been thought though with the necessary risk assessments.

LAS Exemptions:

- Any call received from HCPs (including NHS 111) or where the caller states that they have been advised to call 999 by 111, an HCP or a previously attended member of LAS crew staff
- Third party Stakeholder (caller not on scene) e.g. LFB, MPS, Alarm Services, Care Lines, Carers, Prisons
- Patients having a Psychiatric event (presently threatening suicide, has taken overdose etc.)
- Any safeguarding concerns for any patient
- Any call where the patient has a patient specific protocol (PSP) flagged as SPN
- Any call where the patient is exposed to the extremes of weather (for instance snow or during a heat wave)
- Elderly fallers aged ≥75
- Fallers (any age) who are alone and confirmed as still on the floor
- Adult back pain where the patient is over the age of 55
- Groin pain in males (between 12 and 55 years) where testicular torsion is possible
- Patients with Haemophilia or other bleeding disorders; or patients on blood thinners or warfarin
- Addison's disease, or patients with high or low potassium levels

- Patients currently undergoing Chemotherapy treatment both during and between cycles, patient who may be Neutropenic or have undergone recent (< 72 hours) surgery
- Patients who have been administered diazepam, midazolam or lorazepam or those who are steroid dependent
- Age under 2 years and 75 years and over

6.9 Poor communications to the all agencies in the urgent care system

The pilot project was only communicated to clinical staff working in the 999 Emergency Operations Centres via an generic email sent to the EOC managers just before the project went live

There was no communication with other agencies within the urgent care system.

6.10 SECamb call partition R3/G5 project evaluation

Before the project started the "problem" was identified in the NHS 111 service. However there was no clear analysis that this was the case. There was a general feeling that this was the case, as nationally the AACE made a request for an additional 3 minutes for re-triage and there are pilot projects currently underway funded by NHS England looking at re-triaging R2 calls.

The problem as SECAmb identified it needed to be clearly understood and measured, so that **any** projects that were put in place would show their effects against the original problem. There seemed to be a "scatter gun" approach to project management and so cause and effect was not being measured.

Getting ambulances to the most critically ill must be a priority when there are not enough resources. With the R3/G5 project, after a second clinical assessment the clinicians had reduced the number of callers who required a R2 response. Only 6,496 callers now required a R2 ambulance, and it would have been expected that 75% of these would have been responded to in 8 minutes; therefore 4,872 should have got an 8 minute response and the rest (1,624) a response within 19 minutes. What we don't know is how long the clinical assessment took for each R2 call, if they got one at all, and then how that impacted on the ambulance response times. Finally if they did have a delay, how did that impact on their clinical condition? It is not possible to determine unequivocally that it was the ambulance delay that caused the delay, rather than worsening of the clinical condition.

6.10.1 Table 1: R2 ambulance dispositions after re-triage in the EoC

	NHS 111 Call priority	Dispo	sition af	ter re-tr	iage in	999			
	R2 (R3)	R1	R2	G2 30	G4 60	G4 HCP 60	G4 HCP 120	G4 HCP 240	Hear & Treat
Total	9616	9	6496	1414	147	38	20	6	1486
	100%	0.1%	67.6%	14.7%	1.5%	0.4%	0.2%	0.1%	15.5%

For the G2 calls the NHS 111 Learning and Development Programme Pilot 3 Clinical Assessment of Green Ambulance Disposition Evaluation provided a case for commissioners to consider, including enhanced clinical assessment in their operating models. The below table shows that 25% of calls did not require an ambulance response and that the clinicians dealt with the caller, but what we don't know are the number of times that callers needed to call back to the NHS 111 services after they were given that advice, as this was not evaluated.

6.10.2 Table 2: G2 ambulance dispositions after re-triage in the EoC

	NHS 111 Call	Dispo	sition af	ter re-tr	iage				
	priority G5 calls	R1	R2	G2 30	G4 60	G4 HCP 60	G4 HCP 120	G4 HCP 240	Hear & Treat
Total	10989	0	80	7440	488	98	79	10	2793
	100%	0%	0.7%	67.7%	4.4%	0.9%	0.7%	0.1%	25.4%

Data extraction and measuring the effectiveness of this project is still an ongoing concern. The question of whether this project was the right thing to do cannot be answered, as the project was not designed to have its effectiveness measured when it was set up.

We cannot conclude that patients were not harmed by the R3/G5 project, as all the facts are not known for the calls that went unanswered or for the callers who had significant delay by the re-triage process. Serious Incident reporting by staff was the only review process offered by SECAmb; this on its own is an unreliable way of ascertaining this, as it is a well reported fact that clinicians under report events.

7 Conclusions

Ambulance services need to be able to focus on groups of patients with the most acute needs instead of the performance response times. Enhanced clinical assessment is a way of making sure that ambulances go to the people with the most clinical need. In reality there should have been no need to have implemented a project like this, but there are many problems within the current urgent care systems which need a whole system review as ambulance services cannot be seen in isolation.

The problem within NHS 111 services needed to be clearly understood and measured so that any changes to operating standards would show their effects against the original problem. The problem identified was that the calls coming from NHS 111 were not always correctly triaged and that ambulance resources were being incorrectly utilised for patients who did not require them. The problem was within the NHS 111 service, yet the Trust perceived that this was too problematic too deal and so introduced a pilot project within the 999 Emergency Operating Centres.

When the lead CCG understood what the R3/G5 project was and the fact that it lacked proper governance, they advised the organisation to close the project because of the risks to the public. Through this investigation we have identified a number of very serious concerns which relate to the commencement and subsequent closure of the R3/G5 call partition project.

Main concerns:-

- There was no transparency with the public, as they were not told their call was going into a queue. They thought an ambulance was on its way when this was not true.
- This organisation potentially put the public at risk by changing nationally agreed operating standards with a project that had no evaluation built into its design.
- The governance structures that the Trust had in place were not followed. Whether or not this was intentional we have not been able to answer.
- The risks of the project were either not recognised or were ignored.
- Key staff were not consulted during the design and implementation of this project.
- The project was overseen by at least 4 Executives, who had a responsibility to have worked to the governance policies of the organisation.
- Serious Incidents were not identified, as the clinical risk system had no clinical input and key people within the department were unaware of the R3/G5 call partition.

Providing health care is complex and high risk, especially within the NHS ambulance services. For the public there are often factors which mean it can go wrong for them. Health care providers seek to improve care by transforming their services. However when introducing new pilots and projects they must be done with the correct processes to protect the public from hazards and risks. Ambulance services need to reduce risks to the public by paying constant attention and making further improvements to safety. They need to systematically understand their work processes and the risks associated with them, and then redesign the services with safety and their commissioners in mind.

We are not convinced of the need for a detailed "look back" exercise as there is an inherent risk in an ambulance service, due to the life critical nature of the calls they receive. The time needed to review each patient involved within this project would be considerable. The difficulty assessing whether clinical outcomes were affected by the possible re-triage delay would cast doubt on such an effort. The lack of timely data collection during the project operational time would also significantly hamper any realistic evaluation of the individual patient outcome.

8 Recommendations

Our recommendations are as follows:-

There is independent assurance for achievement of any action plans developed in response to this investigation in addition to the CCG.

SECAmb's governance system is made simple and clear and that it is not circumvented.

Patients and their carers should be present, powerful and involved at all levels of the organisation, including consultation on any projects that are implemented. Their voices should be seen as an asset in monitoring the safety and quality of care.

Transparency within SECAmb should be complete, timely and unequivocal.

Leadership within the organisation must promote a culture that supports quality clinical governance and this must be implemented at all levels of the organisation.

All quality improvement projects are skilfully managed with everyone understanding their responsibilities and accountabilities.

Commissioners – not providers – should decide what they want provided.

The CCGs should identify within their contract how the Trust can negotiate change to operating standards.

Investigations into serious clinical incidents need to be objective and include families from the outset.

There must be improved oversight and scrutiny from the Commissioners (with formal reporting structures, more accurately minuted meetings with better attendance and governance adherence).

Improved internal organisation within SECAmb; improved communication between corporate/operational/clinical governance structure must be implemented.

Organised engagement with patients and the public for timely stakeholder involvement needs to be formalised and actioned.

9 Appendix 1 Operational Strategic Delivery Group - terms of reference

Task and finish group Operational Strategic Delivery Group.

Project name: "Operational Delivery Strategy"
Project sponsor: CEO/ Director for Clinical Operations

Project lead: Acting Associate Director of Clinical Operations **Project management**: Clinical Development Programme Manager

Meetings: The project team will meet or hold a conference call weekly or, at

the discretion of the project lead, more or less frequently based

on the delivery of the project plan.

Project Board
Head of Operational Finance and Resources
Head of PTS
Medical Director
Director of Commercial Services
Senior Operations Manager - Distribution
Head of Fleet
Director of Finance
Director of Clinical Operations
Director of Workforce (off sick for the duration of this project)

Project Board Role: Project Board was to provide governance to the project and the appropriate point of escalation. The Project Board is responsible for implementation of the project.

Standing agenda items:

Project Board Standing Agenda						
1 Update on Red 1 & Red 2 Performance						
2 Review of actions						
3 Review of risks						
4 AOB						
5 Date/time of next meeting/conference call						

Project purpose: The purpose of this project was to put in place a plan that will positively impact SECAmb's performance on the national performance standards for;

National Performance Standards	
Red 1	75 percent of all Red 1 patients must be reached within 8 minutes
	95 percent of all Red1 patients must be reached within 19 minutes
Red 2	75 percent of all Red 2 patients must be reached within 8 minutes
	95 percent of all Red 2 patients must be reached within 19 minutes

Factors identified affecting performance in the first quarter of 2014/15;

- 6.5% increase in contracted activity (7% in responses)
- The cost of the required 'unit hours' has exceeded the income received for additional activity
- Productivity performance has meant 8.2% more 'unit hours' were required
- To date, in Q2, the increase in activity remains at 6.5%
- 31% increase in lost hours at hospital versus the same period last year

A plan is required to provide a structured approach to influence these factors, to increase productivity and to positively affect Red 1 & Red 2 performance.

Project objectives:

- Ensure optimal use of existing operational staff
- Ensure optimal use of existing supporting systems/infrastructure (fleet/logistics etc.)
- · Provide additional operational resources to meet demand
- Provide enhanced support for the Hear and Treat capability
- Provide enhanced support from non-SECAmb resources as required

Project work streams:

- Hear & Treat
- > Fleet, Equipment & Logistics
- > People

Whilst each work-stream will have an identified lead and will be delivered independently, for the plan to be effective the work-streams must be delivered concurrently.

Project input from:

- Clinical Operations
- > Fleet, Equipment & Logistics
- Communications
- Medical
- > Finance
- Commercial Services

Project documentation: Retained by project manager

There will be one document for use during Project Board meetings - the 'action tracker' document. This document will consist of the following items;

- Agenda
- Action log
- Risk register
- Timeline

An initial assessment of assumptions and constraints has been undertaken and will remain under review as the work of the project matures.

Assumptions and constraints:

- The availability of additional vehicle stock
- The availability of additional equipment
- Additional capacity of private providers

Additional capacity within EOC

Risks:

- The project will adopt the Trust's approach to the management of risk as defined in SECAmb's Risk Management Policy.
- A description of all project risks will be included in the project risk log.
- Any risks will be linked to the corporate risks.
- The maintenance of the risk log is the responsibility of the Project Manager and its review that of the Project Sponsor and Project Board.
- Any new risks or escalation issues identified in the Project Board meetings will then be added to the risk log for review by the Project Sponsor/Project Lead.
- Initial Risks initial risks have been identified and will be evaluated via the Project Board and are listed in the risk log.

Success:

- The success of the project will be measured by the impact on Red 1/2 performance. This will be reviewed as part of the standing agenda of the Project Board meetings.
- Specific measures will also be developed to measure the impact of individual work-streams.

Dependencies:

An initial assessment of dependencies has been undertaken and will remain under review as the work of the project matures.

Current dependencies include;

- Fleet vehicle replacement plan
- Changes to operational rotas
- Workforce recruitment plan

Timescales

- The 'action tracker' document, containing the project deliverables will group tasks as immediate, short or medium term, with specific dates for delivery.
- Once work-streams have been agreed with leads, a 'Gantt' chart showing progress against planned tasks will be developed and maintained by the Project Manager.

Costs

- The director of Finance will provide assurance and oversight of the project finances.
- It is anticipated that for some elements of the project the finances will form part of existing Trust plans/budgets.
- Any additional requests for funding will be agreed at the Project Board, in line with the requirements of individual work-streams.