

Healthier Communities Select Committee Supplementary Agenda

Tuesday, 2 December 2014
7.00 pm, Committee Room 2
Civic Suite
Lewisham Town Hall
London SE6 4RU

For more information contact: Timothy Andrew (02083147916)

This meeting is an open meeting and all items on the agenda may be audio recorded and/or filmed.

Part 1

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Agenda Item 3

Healthier Communities Select Committee			
Title	Emergency services review update: London Ambulance Service		
Contributor	Scrutiny Manager	Item	3
Class	Part 1 (open)	02 December 2014	

1. Summary

- 1.1. In 2013-14 the Overview and Scrutiny Committee tasked its select committees with carrying out a coordinated review of Lewisham's emergency services. Each select committee considered information from a range of sources and invited witnesses to provide details about changes to emergency services being implemented in the borough. The Committee's final report can be viewed online here: <http://tinyurl.com/oj8d3hz>
- 1.2. The Healthier Communities Select Committee invited representatives of the London Ambulance Service to attend its meeting on 29 July 2013, the minutes of the meeting can be reviewed online here: [29 May 2013](#)
- 1.3. As part of the Committee's work programme for 2014/15 it has agreed to receive an update from the London Ambulance Service. Officers from the service will attend the meeting on 2 December.

2. Recommendation

- 2.1. The Select Committee is asked to:
 - note the content of the attached documents and consider the information presented at Committee.

Documents

- CQC inspection report
- Cardiac arrest annual report: 2013/14
- Response times
- News item on cardiac arrest survival rates

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We are the regulator: Our job is to check whether hospitals, care homes and care services are meeting essential standards.

London Ambulance Service NHS Trust

220 Waterloo Road, London, SE1 8SD

Tel: 02079215100

Date of Inspections: 30 August 2013
29 August 2013
28 August 2013

Date of Publication: October
2013

We inspected the following standards as part of a routine inspection. This is what we found:

Care and welfare of people who use services	✓	Met this standard
Cooperating with other providers	✓	Met this standard
Cleanliness and infection control	✓	Met this standard
Safety, availability and suitability of equipment	✓	Met this standard
Staffing	✓	Met this standard
Assessing and monitoring the quality of service provision	✓	Met this standard

Details about this location

Registered Provider	London Ambulance Service NHS Trust
Overview of the service	The London Ambulance Service NHS Trust responds to emergency 999 telephone calls, providing medical care to children and adults across London, 24 hours a day, 365 days a year. The service also provides pre-arranged patient transport and finding hospital beds and deals with major incidents.
Type of service	Ambulance service
Regulated activities	Diagnostic and screening procedures Transport services, triage and medical advice provided remotely Treatment of disease, disorder or injury

Contents

When you read this report, you may find it useful to read the sections towards the back called 'About CQC inspections' and 'How we define our judgements'.

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Summary of this inspection

Why we carried out this inspection

This was a routine inspection to check that essential standards of quality and safety referred to on the front page were being met. We sometimes describe this as a scheduled inspection.

This was an announced inspection.

How we carried out this inspection

We looked at the personal care or treatment records of people who use the service, carried out a visit on 28 August 2013, 29 August 2013 and 30 August 2013, observed how people were being cared for and talked with carers and / or family members. We talked with staff, reviewed information given to us by the provider and reviewed information sent to us by commissioners of services.

We spoke with the London Ambulance Services Patients Forum.

What people told us and what we found

People we spoke with told us they received good care from the service. One relative we spoke with told us "the crew were very nice and kind, and quick and efficient. They did everything professionally and had done everything you expected them to." Another relative told us the ambulance crew had asked all about their relative's medication and any allergies, and had taken blood pressure.

There were effective systems in place to reduce the risk and spread of infection. There was a hand hygiene infection control policy in place. People we spoke with told us they felt the ambulances they used were clean and hygienic.

People we spoke with told us they felt the trust worked well with other services. One person told us "paramedics work well with nurses." Another person told us paramedics "had a good relationship with the police."

At the last inspection of 14 and 15 November 2012 we found ambulances were not all suitably equipped to meet the care needs of people using the service. During this inspection we found the trust had addressed this issue by issuing staff with personal equipment.

At the last inspection of 14 and 15 November 2012 we found the trust had failed to ensure there were a sufficient number of suitably qualified, skilled staff employed to meet the demands placed on the service. At this inspection we found there were enough qualified, skilled and experienced staff to meet people's needs.

The trust had a system in place to monitor and assess the quality of its service.

We found the trust had systems in place to ensure people's safety while they received care and treatment by ambulance crews. We found ambulances were responsive to

emergencies. We were told paramedics were caring and we observed this in practice. Overall we found the organisation was well-led with arrangements in place to monitor the quality of its service and effectiveness in the provision of care.

You can see our judgements on the front page of this report.

More information about the provider

Please see our website www.cqc.org.uk for more information, including our most recent judgements against the essential standards. You can contact us using the telephone number on the back of the report if you have additional questions.

There is a glossary at the back of this report which has definitions for words and phrases we use in the report.

Our judgements for each standard inspected

Care and welfare of people who use services

✓ Met this standard

People should get safe and appropriate care that meets their needs and supports their rights

Our judgement

The provider was meeting this standard.

Care and treatment was planned and delivered in a way that was intended to ensure people's safety and welfare.

Reasons for our judgement

People we spoke with told us they received good care from the service. One relative we spoke with told us "the crew were very nice and kind, and quick and efficient. They did everything professionally and had done everything you expected them to." Another relative told us the ambulance crew had asked all about their relative's medication and any allergies, and had taken blood pressure.

People's needs were assessed and care and treatment was planned and delivered in line with their individual care plan. People were initially assessed before they received care and treatment from the service. We observed telephone calls being processed by control room staff. Staff were given on screen prompts to identify and categorise people's conditions when they called the emergency number 999. This information ensured paramedics knew the condition people were suffering from before they arrived. Where patients needed additional clinical support the trust had a clinical support desk staffed by a minimum of two clinicians who would advise paramedics on site if they required it. This showed the trust had a system in place to provide additional support to paramedics to provide patient care and treatment.

There was a system in operation called 'hear and treat', where after an assessment by staff a patient whose condition was assessed as not life threatening or serious could be treated over the phone or referred to NHS 111 for further advice. The system allowed ambulances to respond to other emergencies.

Staff from the trust's specialist hazardous area response team (HART) told us they triaged patients before handing them over to the regular ambulance service. We were told by one paramedic "staff triage patients into category 1, 2 or 3 however it's very much assess, triage and treat if essential or life threatening." This process was called "smart triage" which prioritised categories based on: ability to walk, injury, breathing, pulse rate and breathing within set parameters.

There was a system in place for paramedics to assess patients when they responded to a

call. Paramedics we spoke with told us they assessed and recorded a patient's condition on the Patient Record Form (PRF). One paramedic told us "we do a full observation." We reviewed a sample of PRFs. We found the assessment included a check for vital signs, blood pressure, breathing and an electrocardiogram (ECG). This meant patients received a thorough assessment in order to provide treatment for their conditions.

Care and treatment was planned and delivered in a way that was intended to ensure people's safety and welfare. Paramedics we spoke with told us they risk assessed all incidents they responded to. This ensured they and the patients were safe and risks to safety and welfare were taken into account.

People's care and treatment reflected relevant research and guidance. Information about the latest techniques and clinical updates was available to staff on the trust's intranet, the Pulse. Paramedics we spoke with told us they checked the Pulse to ensure they were up to date with trust wide guidance and reviewed booklets and newsletters. We found clinical update material was readily available. We reviewed two clinical update newsletters. We saw there was information about transient loss of consciousness or "blackouts", managing asthma - inhaler techniques and major trauma care.

People's care and treatment was planned and delivered in a way that protected them from unlawful discrimination. Staff told us they respected people's diverse culture, ethnic origin and condition. The treatment and care they provided took account of this. For example paramedic crews had access to 'language line' a translation service for people and patients where English was not their first language. The trust also assessed the prevalence of illnesses in the population leading to the development of alternative pathways-for example in mental health.

There were arrangements in place to deal with foreseeable emergencies. The trust had a major incident plan in place. Staff demonstrated the procedures followed in the event of a major incident. We saw the two 'Major Incident' rooms based at two different locations which allowed the trust to remain responsive in the event of an emergency. For example the HART team were specifically set up to deal with major incidents and hazardous situations requiring specialist paramedic staff. This showed the trust took appropriate steps to ensure the service and staff were prepared for emergency situations.

People should get safe and coordinated care when they move between different services

Our judgement

The provider was meeting this standard.

People's health, safety and welfare was protected when more than one provider was involved in their care and treatment, or when they moved between different services. This was because the provider worked in co-operation with others.

Reasons for our judgement

People we spoke with told us they felt the trust worked well with other services. One person told us "paramedics work well with nurses." Another person told us paramedics "had a good relationship with the police."

People's health, safety and welfare was protected when more than one provider was involved in their care and treatment, or when they moved between different services. This was because the provider worked in co-operation with others. Paramedics told us they regularly worked with hospital staff, the police, and the fire brigade and. We reviewed a memorandum of understanding between the police and the trust setting out the scope of their relationship during emergency situations.

We saw there was an electronic board in the accident and emergency (A&E) units we visited which gave the estimated time of arrival of ambulances. This allowed A&E staff to prepare for incoming emergencies and coordinate emergency procedures with ambulance crew.

We observed staff in A&E during a patient handover. We observed paramedics completing their Patient Record Forms (PRF) and handing these over to nursing staff. We were told by paramedics different A&Es had different systems. We found paramedics were aware of the systems in place and they would work with staff in different A&Es to ensure a safe and coordinated handover of patients to the care of hospital nurses by sharing the necessary information about a patient's condition. There was evidence paramedics worked with local authorities and referred vulnerable patients who were in need of more support at home. This meant patient care and support was coordinated and met their needs.

There was documentary evidence the trust worked with local mental health teams to provide an alternative care pathway for patients with a mental health illness. Where paramedics had assessed a patient was suffering from a mental health illness they could refer them to a community service where they could receive the appropriate care and treatment. Minutes we reviewed between the trust and a foundation trust showed there was an agreement and procedures in place to ensure patients were referred for further treatment for their condition. This showed the trust supported people to obtain appropriate

health and social care support where needed.

We reviewed information of the trust's relationship with their commissioner. Minutes from the 'Strategic stakeholder management' update from June to July 2013 showed there was a plan in place for the trust to work with their lead commissioner and stakeholders to ensure the services provided met the needs of patients. There was documentary evidence showing the trust worked with clinical commissioning groups (CCGs), consortiums of General Practitioners (GPs), to provide ambulance services in their local areas. This showed the trust was working with other providers to ensure patients care needs were being met.

The trust produced an 'enews' electronic bulletin which was sent to a variety of partner organisations and commissioners including NHS trusts, London Assembly members, clinical commissioning groups and overview and scrutiny committees. We reviewed the August 2013 edition. We found there was information about the NHS 111 service in London, ambulance staff involvement in the Notting Hill Carnival and the number of assaults on staff.

People should be cared for in a clean environment and protected from the risk of infection

Our judgement

The provider was meeting this standard.

People were protected from the risk of infection because appropriate guidance had been followed.

Reasons for our judgement

People we spoke with told us they felt the ambulances they used were clean and hygienic.

There were effective systems in place to reduce the risk and spread of infection. There was a hand hygiene infection control policy in operation. Staff we spoke with and documentary evidence showed appropriate measures were taken to reduce the risk of cross contamination between patients. For example hand washing and using wipes to clean equipment and surfaces.

The trust had an infection, prevention and control committee which met regularly to discuss safer procedures in patient care and ways to minimise cross contamination and infection. We saw from the minutes they discussed infection control audits, steering wheel removable covers and sharps incidents. The trust collated infection control data from ambulance stations across London to ensure there were effective systems in place to prevent, detect and control the spread of infection. This information was used by the trust's lead to monitor infection control procedures in place which included the cleaning of equipment and hand hygiene. This showed the trust took account and addressed the risk of infection and cross contamination to patients.

We saw staff had the appropriate personal protection equipment (PPE) needed to undertake their jobs. Staff told us they were issued with their uniforms which they washed at the highest temperature to prevent cross contamination. We were told by staff disposable gloves, wipes and sprays were always available for cleaning and disinfecting equipment between patients. There was a policy in place to ensure staff were appropriately equipped with PPE. We saw uniform audits were conducted by team leaders to ensure staff compliance with this procedure. Staff told us the trust provided influenza vaccinations to protect staff against the risk of catching influenza and reduce the spread of the virus. This meant the trust were taking appropriate steps to prevent the risk of cross contamination to patients.

The HART team had decontamination equipment and procedures in place for responding to hazardous or chemical emergencies. They were able to demonstrate what steps they would take to ensure patients and paramedics were safe from contamination on site.

Ambulances and cars had deep clean badges which had the date they were last deep cleaned and when they were scheduled to be cleaned next. The provider may find it useful to note that two out of five dates on deep clean badges we looked at had expired. It was noted in the minutes of the vehicle preparation contract meeting dated 1 August 2013 that vehicles should be scheduled to be cleaned the week before they are due rather than when they are overdue. We reviewed contract monitoring information dated June 2013. Overall we found the deep cleaning of vehicles was being undertaken. This meant the trust was taking appropriate steps to ensure patients were treated in clean and hygienic vehicles.

Equipment and reusable medical devices, for example splints, were cleaned or placed in a cage and scheduled to be cleaned for reuse. We reviewed information stating this was part of trust practice to prevent infection and cross contamination. This meant the trust had taken steps to prevent the risk of infection to patients in their care.

We saw there were two bins on an ambulance, one for general waste and another for clinical waste. These were identifiable by the black and orange bags in them. There was a sharps bin for needles. At the ambulance stations we visited there were large bins available for clinical and general waste and sharps. Staff we spoke with told us they disposed of all waste in the correct bins to prevent cross contamination. There was a separate bin for blankets which were kept sealed on ambulances.

People should be safe from harm from unsafe or unsuitable equipment

Our judgement

The provider was meeting this standard.

People were protected from unsafe or unsuitable equipment.

Reasons for our judgement

At our last inspection of 14 and 15 November 2012 we found ambulances were not always suitably equipped to meet the care needs of people using the service.

The trust had an action plan in place to monitor the procurement of new personal equipment and ensure they were distributed to paramedics. There was documentary evidence the trust had undertaken a review of their non-compliance with this standard. We saw the trust had assessed the use and safety of personal equipment used by paramedics. Equipment included blood glucose monitoring kit (BM kit), a device used to monitor the glucose level in people's blood. We found the trust had taken appropriate steps to ensure they had sufficient supplies of equipment to meet the needs of patients in a safe and suitable way.

We saw the trust followed national guidelines for safety and patient care in the use of equipment. For example the National Institute for Health and Care Excellence (NICE) guidance on the treatment of feverish illness in children using tympanic thermometers, a device used to measure a patient's temperature. This showed the trust had taken appropriate steps to treat patients with the recommended equipment.

Some staff we spoke with said they had a BM kit. We reviewed minutes from one meeting held in February 2013 which showed the trust had a contractor in place and had trialled the use of BM kits before their roll out to all staff. We saw evidence the senior trust managers met regularly to discuss the availability of equipment. This ensured matters regarding equipment supply could be addressed appropriately for patient safety.

There was information available to staff about the safe and correct way to use equipment. At one ambulance station we visited guidance was placed on notice boards for staff attention. One supervisor we spoke with told us staff stay up to date with new techniques and using equipment. This meant equipment would be used correctly during patient care and treatment.

There was documentary evidence paramedics completed a checklist before their shift began to ensure they had the adequate equipment. We checked two red paramedic bags; these bags were carried by paramedics on shift and contained the necessary supplies of equipment needed to treat patients. We found they contained the appropriate equipment paramedics needed for their shift. There was a procedure in place to report damaged

equipment at stations. This ensured damaged equipment was highlighted and addressed for patient safety.

Ambulance vans and cars used by the trust were prepared overnight for their daily shifts. The system was called 'make ready' which was provided by a contractor to the trust. We reviewed documentary evidence which showed vehicles had been checked and signed off for use before ambulance crews and paramedics started their shift. This ensured paramedics had the correct equipment to meet patients' needs.

We checked the store room at one ambulance station. We saw there was sufficient quantities of equipment including, dressings and defibrillators for adults and children. There was also airway equipment which included laryngoscope blades and handles; this equipment was used to examine and diagnose problems inside the throat. All equipment was within their expiry dates. For example bags of fluid. There was a system to monitor which items were expired and to be disposed of to ensure patients were not at risk from out of date stock.

Portable equipment on ambulances, for example stretchers and splints were in good working condition. One paramedic we spoke with was able to show us how these were to be used and how they were secured in the ambulance to ensure the patient was safe.

There should be enough members of staff to keep people safe and meet their health and welfare needs

Our judgement

The provider was meeting this standard.

There were enough qualified, skilled and experienced staff to meet people's needs.

Reasons for our judgement

At our last inspection of 14 and 15 November 2012 we found the provider had failed to ensure that there were a sufficient number of suitably qualified, skilled and employed to meet the demands placed on the service.

There was evidence the trust was increasing the number of paramedics. The trust was undergoing a modernisation programme to improve the care provided to patients. The trust had a plan in place to proactively manage sickness to ensure staff could go to occupational health. This showed the trust were supporting staff to be fit and ready to work so that they could provide the essential care needed to meet operational demands and patients' needs.

The trust was reviewing its career structure. There was evidence the trust was supporting staff to progress in their clinical careers to meet the needs of patients. For example a plan was in place to create posts for 'advanced paramedics', paramedics trained in enhanced clinical techniques for patient care. These changes meant the trust could retain skilled and experienced staff and provide a better service to patients.

There was documentary evidence showing the trust had a recruitment plan in place to recruit more front line staff. The trust was reviewing the executive team roles to ensure they were set up to implement the changes underway in the service. There was evidence the trust had obtained funding to recruit 240 new paramedics to meet the demands of the service and ensure there were enough suitably qualified, skilled and experienced paramedics to meet people' needs. We reviewed data for July 2013 showing there were 1644 paramedics in post compared to an estimated 1765 which were still being recruited to in the trust's new structure. This showed the trust was taking appropriate steps to meet people's needs by recruiting sufficient numbers of paramedics.

We reviewed documentary information provided by the resources department which showed how paramedics were deployed on a daily basis to ensure the service was appropriately staffed. There were rotas in place that were continuously reviewed to ensure the operational needs of the service were met by having enough staff on shift to attend to patients. The trust used a relief rota of paramedics who could work across different stations to meet the service's needs and ensure there were enough staff on shift. We saw paramedics were sent to stations where there may be a shortage of staff to ensure there

was adequate cover, due to sickness or leave. This ensured the service maintained adequate staffing levels to provide a safe service to patients around London.

We saw staff using the electronic system called 'geotracker' to see the location and number of ambulances and cars on duty across London. Using the information from 'geotracker' paramedics could be deployed to areas of London with the least coverage of ambulances to ensure enough staff were able to meet patients' calls. The trust also used historical data to map where the highest demand of calls would come from. For example central London. This meant the trust could have enough crews of paramedics in areas where calls were most likely to be made. This showed paramedics were able to respond quickly to patient care and treatment.

Ambulance crews told us about the training that had been introduced to equip support staff to work with paramedics. Training took place over six weeks and staff then went out with a trained crew. There was documentary evidence showing 141 apprentice paramedics were currently in post, this figure exceeded the Trust's estimated number. This meant the trust was meeting their recruitment targets for apprentice paramedics. This ensured there were enough skilled staff available for patient care.

There was documentary evidence the trust was meeting its target for 'category A' response times which required a response within 19 minutes. 'Category A' are life-threatening conditions where speed of response may be critical in saving life or improving the outcome for the patient. This showed the trust were able to provide an appropriate and effective service for patients.

Assessing and monitoring the quality of service provision

✓ Met this standard

The service should have quality checking systems to manage risks and assure the health, welfare and safety of people who receive care

Our judgement

The provider was meeting this standard.

The provider had an effective system to regularly assess and monitor the quality of service that people receive.

Reasons for our judgement

People who used the service, their representatives and staff were asked for their views about their care and treatment and they were acted on. People we spoke with told us they could feedback about the care they received through the London Ambulance Service's 'Patients' Forum'. We reviewed the 'Patients' Forum' annual report. We found the patients' forum were able to comment on the trust's performance and services in a constructive way which allowed the trust to improve its service. For example they were able to provide feedback on the trust's dementia care, care of vulnerable people and alternative care pathways.

Decisions about care and treatment were made by the appropriate staff at the appropriate level. The trust had a system in place to ensure decisions regarding care and treatment were taken at an appropriate level. Paramedics we spoke with told us they were trained to respond to most situations however where further knowledge was required they had a clinical support desk that provided advice. There was a system in place to escalate strategic risks when they occurred and these would be assigned to the relevant committees to resolve.

There was a system in place for the trust to assess and monitor the quality of its service. Staff told us they completed a number of different audits to assess their work as part of their clinical performance indicators (CPI), which monitored the general documentation and the standard of care delivered by ambulance crews. We reviewed the Clinical Audit Annual Report 2012-13. We found the Trust had over a 95% completion rate of CPIs.

The provider took account of complaints and comments to improve the service. There was a system in place to manage complaints. The trust aimed to respond to complaints within 25 working days, more complex cases would be responded to in 35 working days. We reviewed a sample of complaints. We saw the trust used complaints as case studies to learn from. The trust produced a management report showing the trends and themes in the level of complaints. For example the main theme in the July 2013 report for complaints was staff attitude and behaviour. We saw there was a plan in place by the trust to give feedback to members of staff about their attitude and behaviour to ensure patients are treated appropriately.

We reviewed the 'Quarterly Patient Voice & Service Experience Report' from April - June 2013 which showed during the first quarter of the year the trust received 241 complaints. This was consistent with the average for 2012/13 which was 243. It was reported there was a slight increase from the last quarter in the number of cases where the complaint was about the delay in ambulance response at 105. It was stated seasonal impact may have contributed to this increase. We reviewed a sample of complaints received by the trust and a report about patient experience. Where complaints were made there were actions taken to resolve the matter and improve the service.

There was evidence that learning from incidents / investigations took place and appropriate changes were implemented. We reviewed the 'Learning from Experiences' report which provided a number of case studies based upon patient feedback from complaints and investigations. Information was used to inform staff about safer working practices through the trust's intranet and clinical updates.

We found the number of reported clinical incidents were monitored. It was reported that they were lower in frequency than the previous year by 12%. The Trust also monitored the escalation of serious incidents. There was documentary evidence showing the Trust had reviewed 26 serious incidents during 2013-14; of this five were declared with NHS England. Overall we found the number of serious incidents was 10% lower than the previous year.

About CQC inspections

We are the regulator of health and social care in England.

All providers of regulated health and social care services have a legal responsibility to make sure they are meeting essential standards of quality and safety. These are the standards everyone should be able to expect when they receive care.

The essential standards are described in the Health and Social Care Act 2008 (Regulated Activities) Regulations 2010 and the Care Quality Commission (Registration) Regulations 2009. We regulate against these standards, which we sometimes describe as "government standards".

We carry out unannounced inspections of all care homes, acute hospitals and domiciliary care services in England at least once a year to judge whether or not the essential standards are being met. We carry out inspections of other services less often. All of our inspections are unannounced unless there is a good reason to let the provider know we are coming.

There are 16 essential standards that relate most directly to the quality and safety of care and these are grouped into five key areas. When we inspect we could check all or part of any of the 16 standards at any time depending on the individual circumstances of the service. Because of this we often check different standards at different times.

When we inspect, we always visit and we do things like observe how people are cared for, and we talk to people who use the service, to their carers and to staff. We also review information we have gathered about the provider, check the service's records and check whether the right systems and processes are in place.

We focus on whether or not the provider is meeting the standards and we are guided by whether people are experiencing the outcomes they should be able to expect when the standards are being met. By outcomes we mean the impact care has on the health, safety and welfare of people who use the service, and the experience they have whilst receiving it.

Our inspectors judge if any action is required by the provider of the service to improve the standard of care being provided. Where providers are non-compliant with the regulations, we take enforcement action against them. If we require a service to take action, or if we take enforcement action, we re-inspect it before its next routine inspection was due. This could mean we re-inspect a service several times in one year. We also might decide to re-inspect a service if new concerns emerge about it before the next routine inspection.

In between inspections we continually monitor information we have about providers. The information comes from the public, the provider, other organisations, and from care workers.

You can tell us about your experience of this provider on our website.

How we define our judgements

The following pages show our findings and regulatory judgement for each essential standard or part of the standard that we inspected. Our judgements are based on the ongoing review and analysis of the information gathered by CQC about this provider and the evidence collected during this inspection.

We reach one of the following judgements for each essential standard inspected.

✓ Met this standard This means that the standard was being met in that the provider was compliant with the regulation. If we find that standards were met, we take no regulatory action but we may make comments that may be useful to the provider and to the public about minor improvements that could be made.

✗ Action needed This means that the standard was not being met in that the provider was non-compliant with the regulation. We may have set a compliance action requiring the provider to produce a report setting out how and by when changes will be made to make sure they comply with the standard. We monitor the implementation of action plans in these reports and, if necessary, take further action. We may have identified a breach of a regulation which is more serious, and we will make sure action is taken. We will report on this when it is complete.

✗ Enforcement action taken If the breach of the regulation was more serious, or there have been several or continual breaches, we have a range of actions we take using the criminal and/or civil procedures in the Health and Social Care Act 2008 and relevant regulations. These enforcement powers include issuing a warning notice; restricting or suspending the services a provider can offer, or the number of people it can care for; issuing fines and formal cautions; in extreme cases, cancelling a provider or managers registration or prosecuting a manager or provider. These enforcement powers are set out in law and mean that we can take swift, targeted action where services are failing people.

How we define our judgements (continued)

Where we find non-compliance with a regulation (or part of a regulation), we state which part of the regulation has been breached. Only where there is non compliance with one or more of Regulations 9-24 of the Regulated Activity Regulations, will our report include a judgement about the level of impact on people who use the service (and others, if appropriate to the regulation). This could be a minor, moderate or major impact.

Minor impact - people who use the service experienced poor care that had an impact on their health, safety or welfare or there was a risk of this happening. The impact was not significant and the matter could be managed or resolved quickly.

Moderate impact - people who use the service experienced poor care that had a significant effect on their health, safety or welfare or there was a risk of this happening. The matter may need to be resolved quickly.

Major impact - people who use the service experienced poor care that had a serious current or long term impact on their health, safety and welfare, or there was a risk of this happening. The matter needs to be resolved quickly

We decide the most appropriate action to take to ensure that the necessary changes are made. We always follow up to check whether action has been taken to meet the standards.

Glossary of terms we use in this report

Essential standard

The essential standards of quality and safety are described in our *Guidance about compliance: Essential standards of quality and safety*. They consist of a significant number of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2010 and the Care Quality Commission (Registration) Regulations 2009. These regulations describe the essential standards of quality and safety that people who use health and adult social care services have a right to expect. A full list of the standards can be found within the *Guidance about compliance*. The 16 essential standards are:

Respecting and involving people who use services - Outcome 1 (Regulation 17)

Consent to care and treatment - Outcome 2 (Regulation 18)

Care and welfare of people who use services - Outcome 4 (Regulation 9)

Meeting Nutritional Needs - Outcome 5 (Regulation 14)

Cooperating with other providers - Outcome 6 (Regulation 24)

Safeguarding people who use services from abuse - Outcome 7 (Regulation 11)

Cleanliness and infection control - Outcome 8 (Regulation 12)

Management of medicines - Outcome 9 (Regulation 13)

Safety and suitability of premises - Outcome 10 (Regulation 15)

Safety, availability and suitability of equipment - Outcome 11 (Regulation 16)

Requirements relating to workers - Outcome 12 (Regulation 21)

Staffing - Outcome 13 (Regulation 22)

Supporting Staff - Outcome 14 (Regulation 23)

Assessing and monitoring the quality of service provision - Outcome 16 (Regulation 10)

Complaints - Outcome 17 (Regulation 19)

Records - Outcome 21 (Regulation 20)

Regulated activity

These are prescribed activities related to care and treatment that require registration with CQC. These are set out in legislation, and reflect the services provided.

Glossary of terms we use in this report (continued)

(Registered) Provider

There are several legal terms relating to the providers of services. These include registered person, service provider and registered manager. The term 'provider' means anyone with a legal responsibility for ensuring that the requirements of the law are carried out. On our website we often refer to providers as a 'service'.

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Contact us

Phone: 03000 616161

Email: enquiries@cqc.org.uk

Write to us
at: Care Quality Commission
Citygate
Gallowgate
Newcastle upon Tyne
NE1 4PA

Website: www.cqc.org.uk

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Cardiac Arrest Annual Report: 2013/14

October 2014

Produced by:

Gurkamal Virdi, Paul Nicholas and Rachael Fothergill

✉ CARU.Enquiries@lond-amb.nhs.uk

Clinical Audit and Research Unit, Clinical and Quality Directorate, London Ambulance Service NHS Trust, 8-20 Pocock Street, London, SE1 0BW.

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Key findings

- 9,805 cardiac arrest patients were attended by the LAS in 2013/14, with resuscitation attempted for 4,317 patients.
- Survival to discharge rates have increased and represent the highest rates observed since we started collecting data in 1998.
 - The overall survival rate for all patients where resuscitation was attempted is now 10.3% (up from 9.3% in 2012/13).
 - The Utstein survival rate is 32.4%; an increase of 4% from 28.4% in 2012/13.
- Rates of return of spontaneous circulation (ROSC) sustained to arrival at hospital for all patients has remained relatively stable around 31%. For the Utstein group there has been an increase in patients sustaining ROSC to hospital of 4.3% to 58.5% (from 54.2% in 2012/13).
- More patients received bystander cardiopulmonary resuscitation (CPR) this year than ever before, with 55.8% of patients receiving CPR prior to LAS arrival.
- The percentage of patients whose arrest was witnessed has also increased steadily, with nearly half of patients having a witnessed arrest (48.6%).
- The presence of an initial shockable rhythm has increased slightly to 21.5%. Patients with a shockable rhythm have both high rates of ROSC sustained to hospital (57.4%) and survival to discharge (36.3%).
- Presumed cardiac aetiology was the most frequent cause of cardiac arrest (85.7%). Patients in this group had a ROSC to hospital rate of 32.1% and 11.2% survived to discharge.
- A greater number of patients who achieved ROSC with evidence of myocardial infarction were taken to a Heart Attack Centre (HAC) compared to the previous year (297 vs. 277). These patients have a survival rate of 47.6%; considerably higher than the survival rate of presumed cardiac patients in general.
- Patients where a public access defibrillator was used (n=18) also have an incredibly high rate of ROSC sustained to hospital (77.8%) and survival to discharge rate (58.8%).

1. Introduction

9,805 patients suffered an out-of-hospital cardiac arrest in London between 1st April 2013 and 31st March 2014. The care that out-of-hospital cardiac arrest patients receive from Emergency Medical Services (EMS) influences their immediate survival chances as well as their long term outcomes. This report presents key information regarding the response and treatment that patients received from the London Ambulance Service NHS Trust (LAS), the factors present on arrival of LAS staff that may affect survival, and the outcome of patients.

Data has been sourced from the LAS cardiac arrest registry. The registry captures information from Patient Report Forms (PRFs), vehicle Mobile Data Terminals (MDTs), 999 call logs and defibrillator data. Survival to discharge from hospital information is collected using national databases and individual hospital records.

A breakdown of figures by LAS Complex and receiving hospital can be found in Appendices 1 and 2 respectively. Appendix 3 is dedicated to a specific group of cardiac arrest patients that are conveyed to a Heart Attack Centre (HAC) as part of a specialist care pathway. Appendix 4 displays information according to the Clinical Commissioning Group (CCG) area in which the cardiac arrest occurred. Appendix 5 presents figures specifically for cases where defibrillators were utilised in public places. Finally, Appendix 6 focuses on cardiac arrest patients under the age of 35.

A glossary of abbreviations and terms are included on page 14 for readers unfamiliar with the medical or operational terminology used in the ambulance service.

2. Overview

Of the 9,805 out-of-hospital cardiac arrest patients attended, a resuscitation effort was not undertaken in 56.0% (n=5,488) of cases. The vast majority of patients were recognised as deceased on arrival (92%; n=5,046), with the remaining 8% (n=442) having a Do Not Attempt CPR (DNA-CPR) order - or similar equivalent - in place, or the patient's death was expected.

Resuscitation was attempted by LAS staff for 44.0% (n=4,317) of all cardiac arrest patients. The remainder of this report focuses on these patients.

Table 1 (overleaf) shows that the typical out-of-hospital cardiac arrest patient where resuscitation was attempted was male in his mid-60's. The arrest occurred in the morning during winter at a private location. A high priority response in less than 7 minutes was provided. The arrest was most likely of a cardiac cause, witnessed by a bystander with CPR commenced prior to the LAS arrival, and an asystolic rhythm was observed on initial assessment.

Gender	
Male	63.1%; n=2,725
Female	36.9%; n=1,591
Unknown	0%; n=1

Age (years)	
Overall average	66
Male average	64
Female average	69

Race [^]	
White	62.6%; n=2,702
Mixed	0.4%; n=16
Asian	8.2%; n=352
Black	8.0%; n=347
Other	3.9%; n=170
Unable to obtain	15.3%; n=661
Not documented	1.6%; n=69

Peak occurrence	
Time of day (hours)	08:00-11:59 (24.1%; n=1,039)
Day	Monday (15.9%; n=687)
Month	December (10.3%; n=446)

Response category	
R1	61.0%; n=2,633
R2	32.3%; n=1,395
C1	1.4%; n=59
C2	4.0%; n=172
C3	0.8%; n=35
C4	0.5%; n=23

Response times (median in minutes)	
999 call - scene	06:40
999 call - CPR [#]	08:12
999 call - defibrillation [#]	11:34

Location	
Private	77.7%; n=3,356
Public	22.3%; n=961

Witnessed	
Bystander	48.6%; n=2,097
LAS staff	18.3%; n=791
Unwitnessed	33.0%; n=1,423
Not documented	0.1%; n=6

Bystander CPR [#]	
Yes	55.8%; n=1,967/3,526
No	44.2%; n=1,559/3,526

Initial rhythm	
Asystole	50.0%; n=2,157
PEA	27.3%; n=1,178
VF/pulseless VT	21.5%; n=927
Not documented	1.2%; n=55

Aetiology	
Presumed cardiac	85.7%; n=3,700
Other medical	4.5%; n=195
Trauma	4.1%; n=175
Asphyxiation	3.3%; n=143
Drowning	0.6%; n=28
Overdose	1.8%; n=76

Airway management [*]	
Airway placed	86.2%; n=3,721/4,317
ETT success rate	82.7%; n=1,354/1,637
SGA success rate	90.5%; n=2,674/2,954
ETCO ₂ measured	95.9%; n=3,568/3,721

Recognised as life extinct on scene	
Yes, by LAS	31.4%; n=1,354
Yes, by other Healthcare Professional	3.6%; n=157
No	65.0%; n=2,806

[^] Due to the critical condition of cardiac arrest patients, definitive race information is not always possible to obtain and therefore this data should be viewed with caution.

[#] Figures for bystander CPR and 999 call - CPR exclude arrests witnessed by LAS staff. 999 call - defibrillation calculations are based on patients with an initial rhythm of VF/VT only.

^{*} Airway management refers to the application of an advanced airway intervention, including endotracheal tube (ETT) and supraglottic airway device (SGA). End tidal carbon dioxide (ETCO₂) is measured to assess the accurate placement of these devices.

Table 1 – Profile characteristics of all cases where resuscitation was attempted (n=4,317).

3. Outcomes of resuscitation attempted patients

3.1. Outcomes of all resuscitation attempted patients

ROSC was sustained to hospital for 31.2% (n=1,346/4,317) of patients. The rate of survival to discharge was 10.3% (n=436/4,239ⁱ); an increase of 1% from the 9.3% reported in 2012/13. Figures 2 and 3 (page 6) show the improvements seen over time for rates of ROSC sustained to hospital and survival to discharge.

ROSC sustained to hospital	
Yes	31.2%; n=1,346
No	68.8%; n=2,969
Not Documented	0%; n=2

Survived to discharge ⁱ	
Yes	10.3%; n=436/4,239
No	89.7%; n=3,803/4,239

Table 2 – ROSC sustained to hospital and survival to discharge for all cases where resuscitation was attempted.

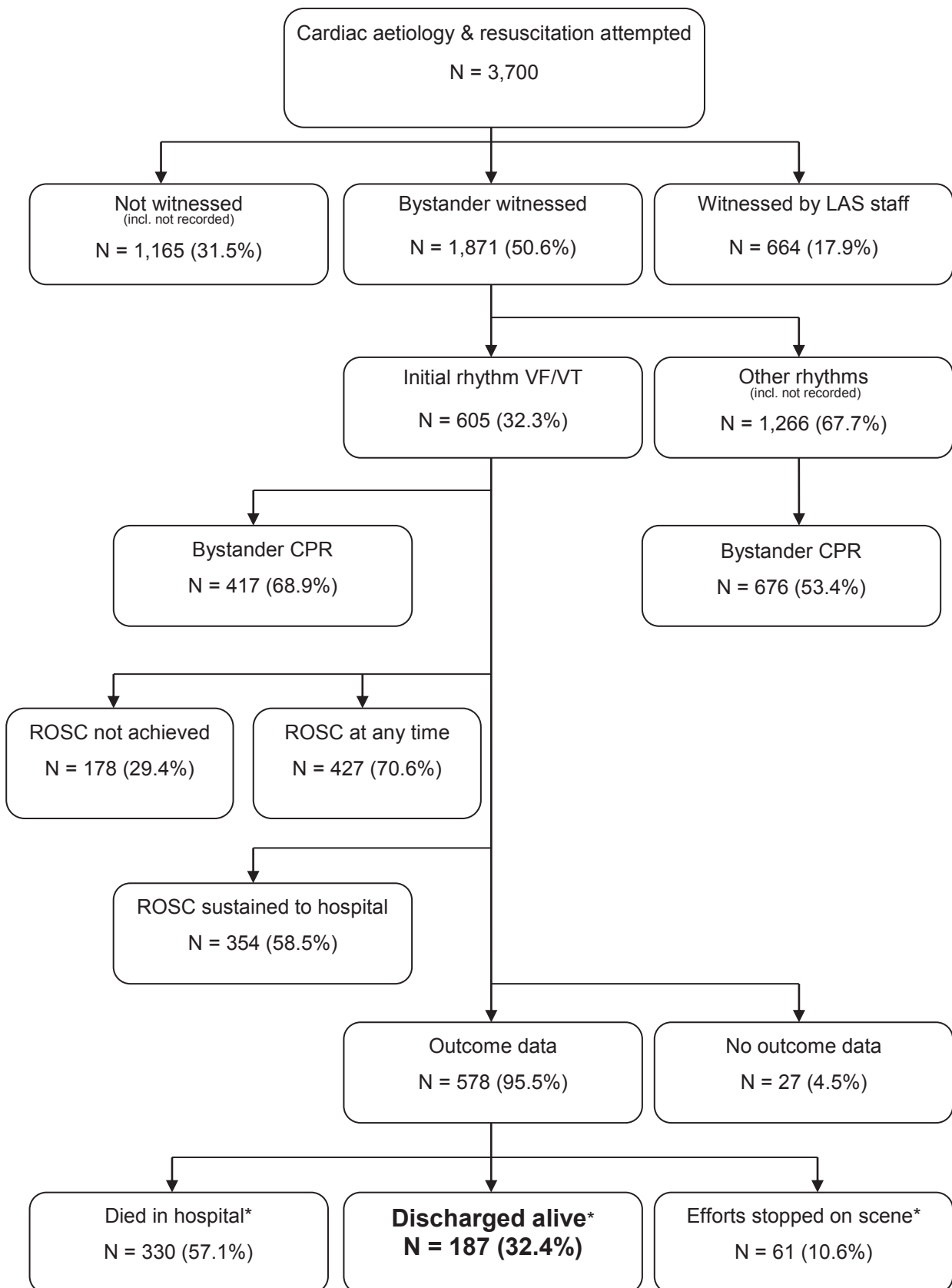
3.2. Utstein comparator group

The Utstein method for calculating survival is an internationally recognised measure that is used to compare patient outcomes amongst EMS providers. It examines a subset of patients where resuscitation has been attempted and requires the presence of the following factors: the arrest was witnessed by a bystander, the patient's heart was in a shockable rhythm on arrival of the EMS (VF/pulseless VT), and the arrest is of a presumed cardiac aetiology. In 2013/14, the LAS attended a total of 605 patients that met the Utstein criteria.

Figure 1 shows that ROSC was sustained to hospital for 58.5% of patients (n=354) and survival to discharge was achieved for 32.4% (n=187/578); representing increases of 4.3% and 4% respectively from 2012/13. Both the ROSC sustained to hospital and survival to discharge figures are the highest observed to date (see Figures 2 and 3).

ⁱ Denominator excludes patients with unknown survival outcomes (n=78).

ⁱⁱ For bystander CPR analysis, LAS staff witnessed arrests are excluded.



* The percentages do not equal 100% due to rounding.

Figure 1 – Outcome for the Utstein comparator group.

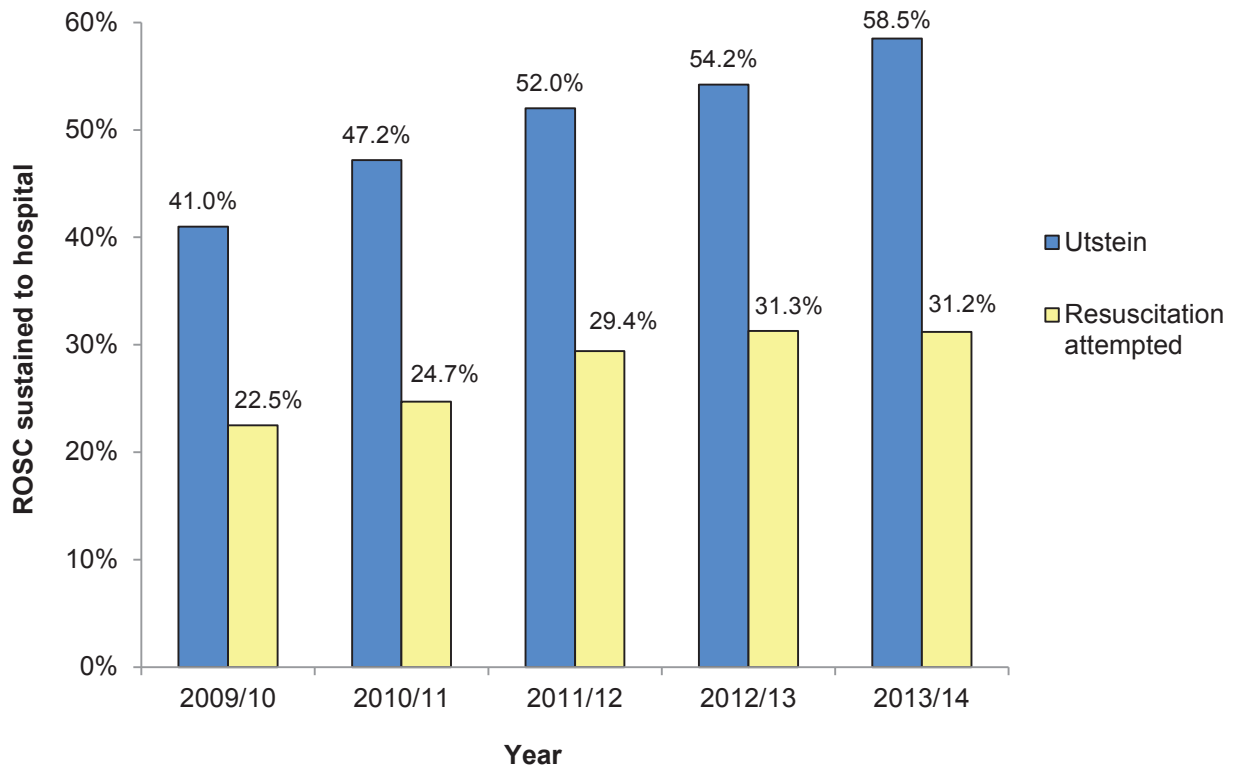


Figure 2 – ROSC sustained to hospital for the Utstein comparator group and all resuscitation attempted patients by year.

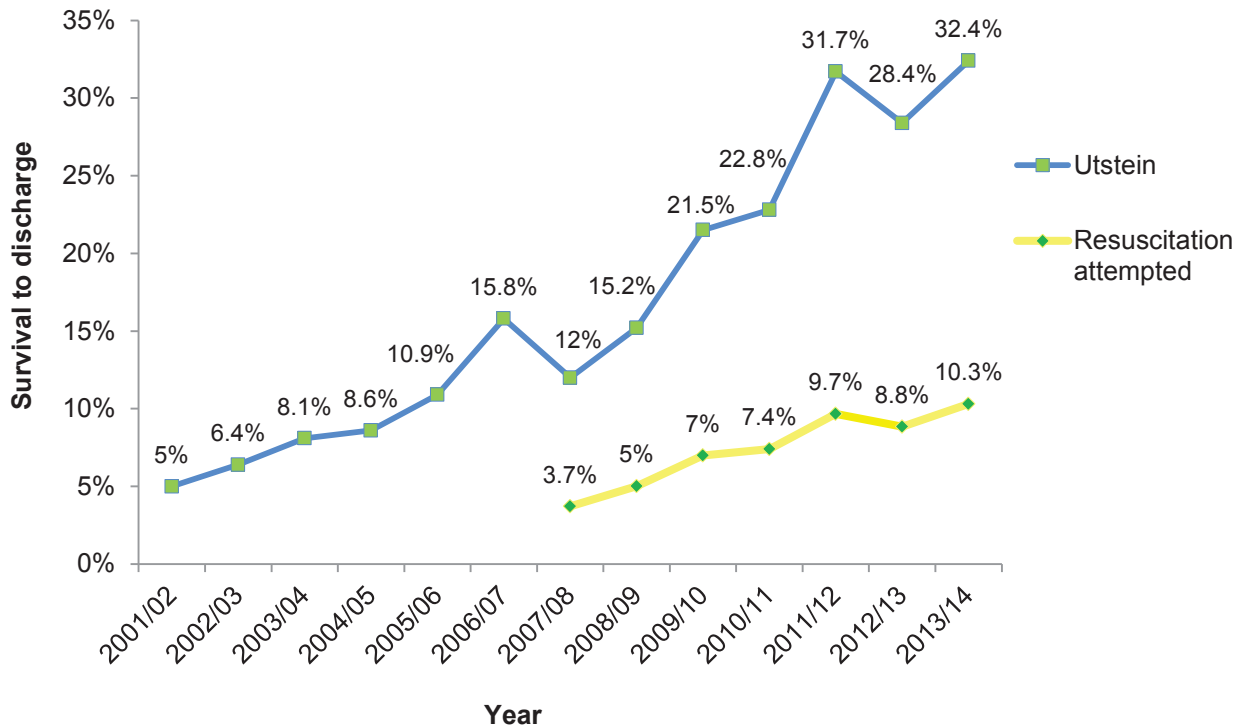


Figure 3 – Survival to discharge for the Utstein comparator group and all resuscitation attempted patients by year.

4. Factors influencing improvements in outcomes of resuscitation attempted patients

Multiple factors influence ROSC and survival to discharge rates; many of which are outside the control of the EMS as they will be linked to patients underlying co-morbidities, aetiology of the arrest, presentation of the patient and situational factors (such as location, whether a witness was present, and whether bystander CPR was undertaken). This section describes how these factors have influenced the improved rates of ROSC sustained to hospital and survival to discharge reported in section 3.

4.1. Location

The largest proportion of cardiac arrests where resuscitation was attempted occurred in a private location (77.7%; n=3,356). The remaining 22.3% (n=961) occurred within public areas, with the street being the most common location (10.7%; n=461). Survival from cardiac arrests is highest in leisure centres or sports clubs (44.1%), followed by those arrests that occur at work (33.3%).

Private locations (n=3,356)	Frequency	Survival to Discharge ⁺
Home	68.9%; n=2,974	8.4%; n=248/2,945
Care home	8.8%; n=382	2.6%; n=10/380

Public locations (n=961)	Frequency	Survival to Discharge ⁺
Street	10.7%; n=461	15.6%; n=67/429
Work	1.9%; n=80	33.3%; n=26/78
Public transport	1.5% n=64	21.0%; n=13/62
Healthcare facility (e.g. GP surgery, walk in centre)	1.7%; n=75	18.9%; n=14/74
Social Venue (e.g. Pub, Restaurant, Cinema)	1.2%; n=50	20.4%; n=10/49
Hotel/ Hostel	0.9%; n=39	13.9%; n=5/36
Shop/ Bank	0.8%; n=36	8.8%; n=3/34
Leisure Centre/ Sports Club	0.8%; n=34	44.1%; n=15/34
Parkland/ Woodland	0.5%; n=23	31.8%; n=7/22
Airport	0.4%; n=18	27.8%; n=5/18
Stairwell	0.4%; n=17	25.0%; n=4/16
Other (e.g. School, Prison, Place of Worship)	1.5%; n=64	14.5%; n=9/62

⁺ Denominators exclude patients with unknown survival outcomes.

Table 3 – Location of cardiac arrests where resuscitation was attempted.

4.2. Bystander CPRⁱⁱ & witnessed arrests

Figure 4 shows that there has been an increase in bystander CPR and witnessed arrests over the last 5 years, with 2013/14 demonstrating the highest levels to date at 55.8% and 48.6% respectively. These increases together are important as outcomes are observed to be better when bystander CPR is initiated in patients with a witnessed arrest (see Figure 5).

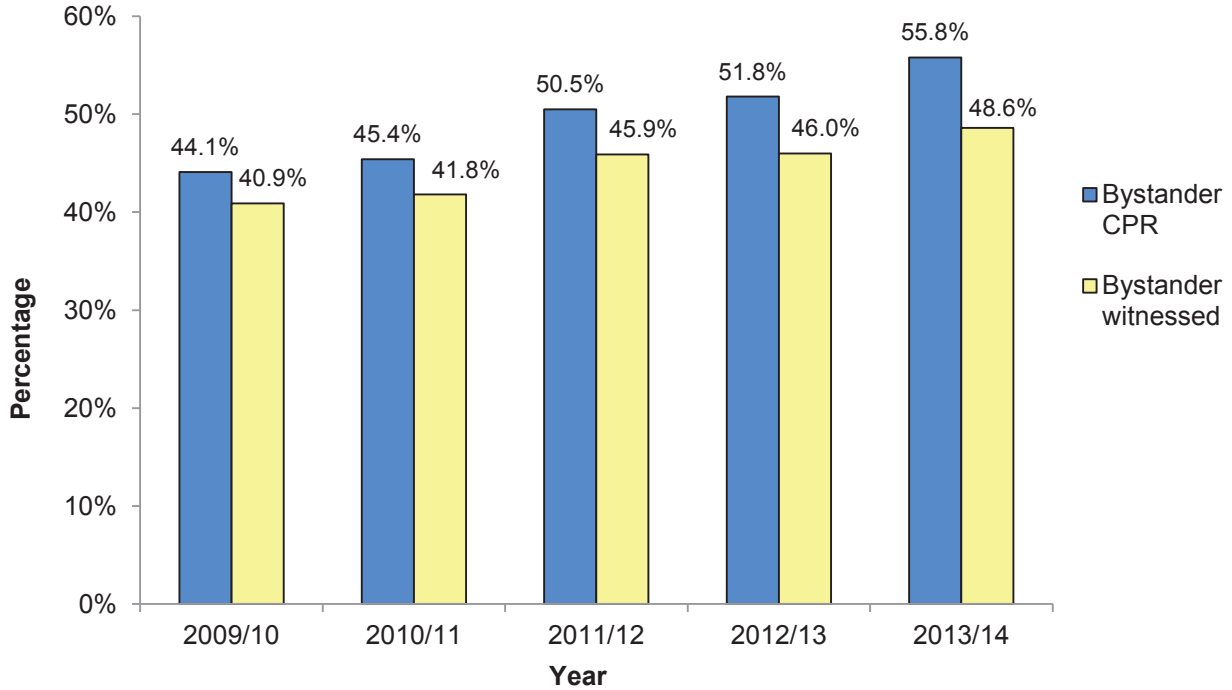


Figure 4 – Rates of bystander CPR and witnessed arrests for all resuscitation attempted patients.

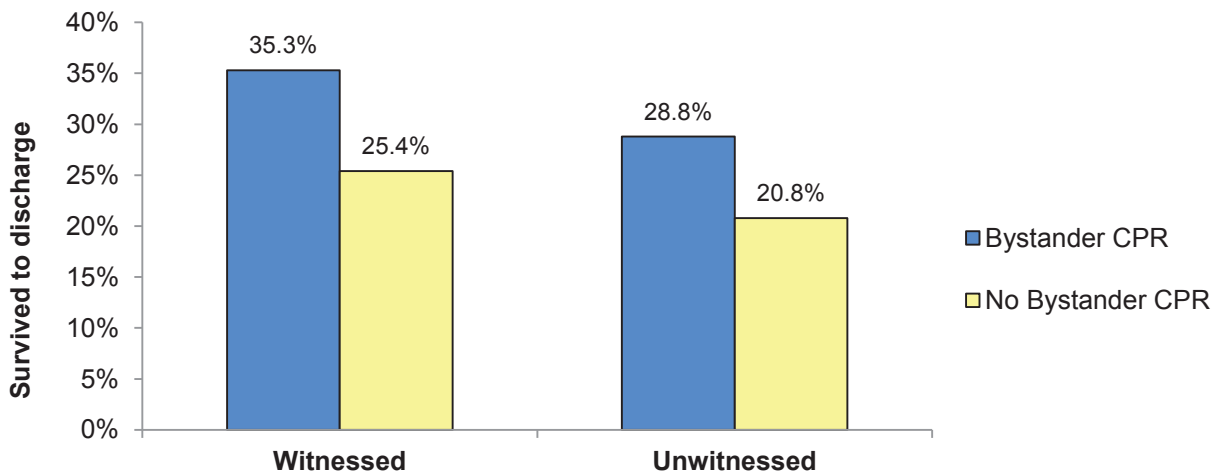


Figure 5 – Survival rates by witnessed and bystander CPR for all resuscitation attempted patients with a shockable rhythm.ⁱⁱⁱ

ⁱⁱ For bystander CPR analysis, LAS staff witnessed arrests are excluded.

ⁱⁱⁱ Shockable rhythm only is examined to enable homogeneity of data.

4.3. Initial rhythm^{iv}

Patients where resuscitation was attempted with an initial rhythm of VF/pulseless VT were considerably more likely to be associated with ROSC sustained to hospital (57.4%; n=532/927) and survive to hospital discharge (36.3%; n=325/896). Patients with an initial rhythm of PEA had nearly half this rate of ROSC sustained to hospital (29.3%; n=345/1178) and a substantially lower survival to discharge rate (4.2%; n=49/1,155). Asystolic patients had the lowest rate of ROSC sustained to hospital (20.5%; n=442/2,157) and survival to discharge (2.2%; n=46/2,137).

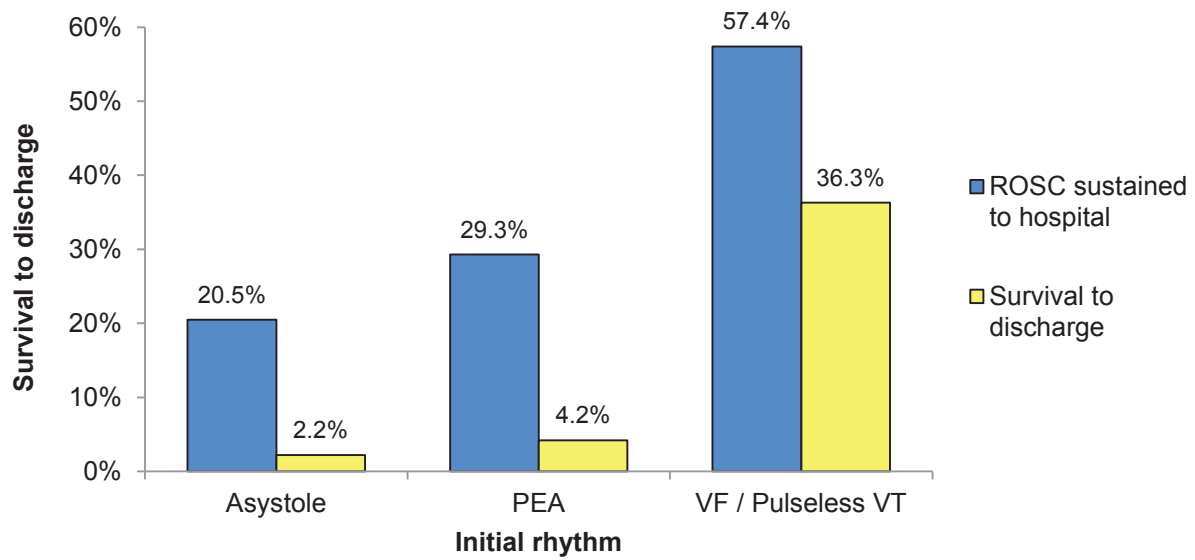


Figure 6 – Initial rhythm compared to ROSC sustained to hospital and survival to discharge for all resuscitation attempted patients.

4.4. Aetiology

Of all patients for whom resuscitation was attempted, the most frequent aetiology of arrest was presumed cardiac (85.7%; n=3,700/4,317), and this group of patients has one of the highest rates of ROSC sustained to hospital and survival to discharge (32.1% and 11.2% respectively). The remaining aetiologies are a mix of disparate origins, including other medical causes, traumatic arrests caused by external causes (such as penetrating and blunt injuries, burns and electrocution), asphyxiation (such as respiratory obstruction and hanging), drowning and overdose. As the causes are so varied and relatively low in number, the ROSC sustained to hospital and survival to discharge rates are equally divergent, as are the initial rhythms in which these patients present (see Table 4).

^{iv} Not documented values are excluded from initial rhythm analysis and survival data does not include patients with unknown outcomes.

Cause	No.	Initial Rhythm [^]			ROSC sustained to hospital [#]	Survived to discharge ^{#+}	
		Asystole	PEA	VF/VT			
Presumed cardiac	3,700	48.2% (1,782)	26.6% (983)	24.4% (904)	32.1% (1,188)	11.2% (407/3,640)	
Other Medical[®]	Terminal illness	111	62.2% (69)	35.1% (39)	2.7% (3)	16.2% (18)	0% (0/111)
	Asthma/COPD	33	45.5% (15)	45.5% (15)	3.0% (1)	48.5% (16)	12.1% (4/33)
	Infection	11	45.5% (5)	54.5 (6)	-	27.3% (3)	0% (0/11)
	Pulmonary embolism	10	50.0% (5)	30.0% (3)	20.0% (2)	40.0% (4)	0% (0/10)
	Internal bleeding	9	55.6% (5)	33.3% (3)	11.1% (1)	22.2% (2)	0% (0/9)
	Stroke	6	16.7% (1)	66.6% (4)	16.7% (1)	0% (0)	0% (0/6)
	Neonatal	8	50.0% (4)	-	-	0% (0)	12.5% (1/8)
	Hypothermia	4	-	25.0% (1)	75.0% (3)	0% (0)	0% (0/4)
	Lung failure	2	-	100% (2)	-	50% (1)	0% (0/2)
	Anaphylaxis	1	-	100% (1)	-	0% (0)	0% (0/1)
	<i>Total</i>	195	53.3% (104)	37.9% (74)	5.6% (11)	22.6% (44)	2.6% (5/195)
Trauma[®]	Road Traffic Collision	64	46.9% (30)	48.4% (31)	1.6% (1)	14.1% (9)	1.7% (1/59)
	Stabbing	35	48.6% (17)	34.3% (12)	2.8% (1)	5.7% (2)	0% (0/35)
	Fall from height	34	61.8% (21)	38.2% (13)	-	8.8% (3)	0% (0/33)
	Hit by train	8	62.5% (5)	25.0% (2)	-	0% (0)	0% (0/8)
	Fall down stairs	7	71.4% (5)	28.6% (2)	-	42.9% (3)	0% (0/6)
	Crush injury	6	66.6% (4)	16.7% (1)	16.7% (1)	0% (0)	0% (0/6)
	Haemorrhage	5	20.0% (1)	80.0% (4)	-	80.0% (4)	20.0% (1/5)
	Blunt assault	4	100% (4)	-	-	25.0% (1)	0% (0/4)
	Burns	3	33.3% (1)	66.7% (2)	-	0% (0)	0% (0/3)
	Shooting	3	66.7% (2)	-	-	0%	0% (0/3)
	Electrocution	3	33.3% (1)	-	66.7% (2)	33.3% (1)	33.3% (1/3)
	Head injuries	2	50.0% (1)	50.0% (1)	-	50.0% (1)	0% (0/2)
	Evisceration	1	100.0% (1)	-	-	0% (0)	0% (0/1)
	<i>Total</i>	175	53.1% (93)	38.9% (68)	2.9% (5)	13.7% (24)	1.8% (3/168)
Asphyxiation	Obstruction	67	56.7% (38)	32.8% (22)	6.0% (4)	47.8% (32)	7.6% (5/66)
	Hanging	62	77.4% (48)	21.0% (13)	-	33.9% (21)	8.1% (5/62)
	Suffocation	9	100% (9)	-	-	22.2% (2)	11.1% (1/9)
	Smoke inhalation	5	60% (3)	40% (2)	-	60% (3)	0% (0/3)
	<i>Total</i>	143	68.5% (98)	25.9% (37)	2.8% (4)	40.6% (58)	7.9% (11/140)
Drowning	28	85.7% (24)	14.3% (4)	-	25.0% (7)	7.7% (2/26)	
Overdose	76	73.7% (56)	15.8% (12)	3.9% (3)	32.9% (25)	11.4% (8/70)	

[^] Not documented values (n=55) are excluded from initial rhythm analysis.

[#] Please view with caution due to small numbers.

⁺ Denominators exclude patients with unknown survival outcomes.

[®] This data cannot be compared to previous years due to differences in classification of aetiology.

Table 4 – Aetiology of all cases where resuscitation was attempted.

4.5. Post cardiac arrest patients conveyed to Heart Attack Centres (HACs)

Patients who have suffered a cardiac arrest of presumed cardiac origin and present with a STEMI on a 12-lead ECG post ROSC are eligible to be conveyed to any of the 8 London HACs on a specialist pathway. The HAC will undertake immediate angiography with a view to carrying out rapid primary Percutaneous Coronary Intervention (pPCI) to unblock the coronary arteries as necessary.

During 2013/14, there were a total of 297 patients that were treated under this pathway pan-London. The rate of ROSC that was sustained to a HAC was very high (91.9%; n=273) as crews are required to stabilise a patient prior to conveyance to a HAC. Survival to discharge amongst patients treated using this pathway was 47.6% (n=137/288). A breakdown of survival and initial rhythm for these patients by all 8 London HACs can be found in Appendix 3.

5. Discussion

The survival rates of all patients on whom resuscitation was attempted and the Utstein comparator group (10.3% and 32.4% respectively) have surpassed the previously highest rates recorded in 2011/12. Furthermore, over the past 15 years, there has been an almost eight-fold increase in survival rates for cardiac arrest patients treated by the LAS. Rates for each year have sometimes fluctuated, but when combined they undisputedly show an upward trend (see Figure 3).

An increase was also seen in ROSC sustained to arrival at hospital in the Utstein comparator group of over 4% to 58.5% this year (from 54.2% in 2012/13). This is partly a reflection of the efforts made by our staff to deliver effective resuscitation practices to achieve cardiac output and to stabilise patients to increase the chances that ROSC is sustained until arrival at hospital. The LAS have continued to enhance pre-hospital cardiac arrest care through updated guidelines, including a change to deliver a full energy shock of 360 joules to patients. Enhanced training to staff on basic and advanced life support skills and the management of cardiac arrest on scene have also been a continued focus. To this end the LAS has introduced the concept of Crew Resource Management (CRM) into training to help minimise the effects of human error in a situation by using effective communication and leadership; vital skills in managing a complex cardiac arrest scene.

Rates of bystander CPR have continued to increase yearly, which may also influence the improvements in survival rate. In all patients where resuscitation was attempted, an increase of around 4% was observed in bystander CPR rates from the previous year to a record high of 55.8% (see Figure 4). The LAS has supported the delivery of education to members of the public in CPR techniques for over 10 years, and in 2013/14 alone the LAS provided Heartstart training courses teaching basic lifesaving skills to 19,944 people in London. Furthermore, to encourage bystanders to commence CPR, our Emergency Medical Dispatchers continue to provide instructions for compression-only CPR to callers.

Initial presenting rhythms of VF/pulseless VT have increased slightly to 21.5% from 20.6% in 2012/13. Patients presenting with VF/pulseless VT rhythms are more likely to survive, with patients in initially non-shockable rhythms having considerably poorer prognoses (see Figure 6).

The initiation of bystander CPR is crucial as the risk of asystole increases proportionally to downtime without CPR since the onset of the arrest.

Furthermore, it is imperative that bystanders have immediate access to an automated external defibrillator (AED) as early defibrillation has a positive effect on outcomes^{1,2}. In 2013/14, 18 patients were delivered a shock from a public access AED prior to LAS arrival and an impressive 58.8% survived (see Appendix 5). To further support the chances of a defibrillator being available, the LAS have continued to build on the success of our existing network of public access AEDs by installing even more in public places over the past year. There are now over 2,000 sites with at least one AED present in London. The LAS supports these defibrillator sites through its Defibrillator Accreditation Scheme to ensure that all installed AEDs are maintained to the required standard and have enough people with the knowledge to use them. The LAS has also launched a major campaign entitled 'Shockingly Easy', which aims to promote public access defibrillator use and install a further 1000 AEDs across public places in London.

Survival by aetiology varies quite widely as shown in Table 4. The most frequent cause of arrests is presumed to be cardiac in nature (n=3,700) and many of the patients that survive their cardiac arrest are from this group (n=407; 11.2%). Furthermore, patients who have a presumed cardiac cause clearly evidenced by the presence of a STEMI on their ECG and are conveyed to a HAC as detailed in section 4.5 have a much higher survival rate of 47.6%. Patients in this group with an initial shockable rhythm fare better with an overall survival rate of 59.4% compared to initially non-shockable patients (13.3%). However, both figures are higher than the survival from initial shockable and non-shockable rhythms in general (36.3% versus 3.6% respectively).

Patients suffering traumatic cardiac arrests have a very low survival rate, with only three patients (out of 175) surviving to discharge in total. As part of our efforts to improve traumatic arrest outcomes the LAS have adopted a new protocol based on an algorithm aimed at ensuring the effective management of traumatic arrests³.

It is perhaps expected that there were no survivors of the 111 patients that were in the end stages of terminal illness when resuscitation was attempted. Many of these patients have no official document detailing their wishes, making it difficult for staff to make the decisions necessary in the interests of the patient. Staff will often have to rely on a combination of evidence such as palliative care documentation, district nursing notes, or the presence of certain medication and equipment, to make an informed decision on whether to commence resuscitation. 'Co-ordinate My Care' – a national system holding details of palliative care records – has been introduced to aid staff in such decisions. In 2014/15, we hope to link this system to our MDT to ensure staff are alerted to these patients' care decisions en route to scene. We also aim to introduce palliative care nurses (supported by Marie Curie) into the Clinical Hub to help support and advise staff in these difficult circumstances on scene.

One area that still requires improvement is the frequency at which we download data from the defibrillator utilised by LAS staff. Valuable information is captured by the defibrillator that can be used to assist in ongoing patient care, provide individualised feedback to staff and for service improvement in general. A simplified and secure method of transferring event files from the defibrillator to a centralised database must be identified to resolve this issue.

Looking forward, there are major changes that will affect cardiac arrest treatment and outcomes. The most prominent of these is the introduction of the new clinical role of Advanced Paramedic

Practitioner (APP) from May 2014. Where possible, the APPs are dispatched to cardiac arrests of all causes and automatically take over primacy of care, utilising CRM to effectively manage resuscitation efforts. APPs will most likely attend at least one cardiac arrest each shift, which enables a specialism to develop as in general staff only attend a few cardiac arrests per year. The benefits of this specialised response to cardiac arrest has been trialled in a pilot study, which showed encouraging results, but we will be able to build a larger and better defined picture with the data we collect as the APP role develops⁴. APPs also carry mechanical CPR devices that aid rapid extrication to hospital in certain groups of patients without the detrimental effects of providing manual CPR whilst moving the patient and en route to hospital. Ultrasound is another tool available to APPs, enabling reversible causes such as a pulmonary embolus, coronary artery occlusion, or cardiac tamponade to be identified rapidly. APPs also have access to ventilator devices for use post ROSC to reduce the effects of hypoxaemia. In addition to these clinical skills, the APPs also provide feedback and debrief crews after each event.

The LAS will continue to actively participate in cardiac arrest research. We will provide data to the Out-of-Hospital Cardiac Arrest Outcomes (OHCAO) project aimed at building a national registry where the epidemiology and outcome of cardiac arrests can be better understood at a national and regional level. Furthermore, data from one month will be provided to the European Registry of Cardiac Arrest (EURECA ONE); the first time epidemiological, treatment and outcome data has been examined at a European level. In 2014/15, the LAS will participate in PARAMEDIC 2 - a randomised double blind controlled trial that will examine adrenaline use in cardiac arrest patients, and its impact on patient survival and neurological capacity.

We are very pleased that our survival rates continue to increase; the fact that this year represents our highest survival rates to date constitutes a great achievement for the LAS. Our efforts in the pre-hospital environment are reflected in our enhanced rate of ROSC sustained to hospital, of which our staff should be proud. We hope that the continued rollout of new initiatives for our cardiac arrest patients will build upon our current high standard of care and result in even higher survival rates in the coming years.

References

1. Ilkhanoff L, Goldberger JJ. Out-of-Hospital Cardiac Arrest: Getting Beyond the Tip of the Iceberg. *Circulation*, 2012; 126: 793-796
2. Colquhoun MC, Chamberlain DA, Newcombe RG, et al. A national scheme for public access defibrillation in England and Wales: Early results. *Resuscitation*, 2008; 78: 275-280
3. Lockett DJ, Lyon RM, Davies GE. Development of a simple algorithm to guide the effective management of traumatic cardiac arrest. *Resuscitation*, 2013; 84: 738-742
4. Clarke S, Lyon RM, Short S, et al. A specialist, second-tier response to out-of-hospital cardiac arrest: setting up TOPCAT2. *Emergency Medicine Journal*, 2014; 31: 405-407

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Glossary for abbreviations and terms

Advanced Life Support – Includes skills such as advanced airway management, manual defibrillation, cannulation and drug administration.

Angiography – A procedure performed at a Heart Attack Centre to check the blood flow in the coronary arteries.

Automated External Defibrillator (AED) – A portable defibrillator that automatically diagnoses if the heart is in a rhythm that can be shocked and if so delivers a shock.

Basic Life Support – Includes skills such as CPR, manual airway positioning and AED use.

Bystander – A lay person or non-Emergency Medical Service personnel.

Complex – Each of the three LAS Areas are subdivided into several smaller operational areas known as Complexes. Please note that these do not necessarily align with Clinical Commissioning Group areas.

Defibrillators – The LAS use portable defibrillators to help diagnose the heart's rhythm and deliver a pre-set charged shock of 360J. LAS staff use both AEDs and manual defibrillators, and are able to use an override to enable CPR to be continued whilst the AED is charging.

Electrocardiogram (ECG) – The LAS use 12-lead ECGs to diagnose STEMIs.

Emergency Medical Dispatchers (EMDs) – Staff based in the LAS Emergency Operations Centre that answer 999 calls and dispatch resources to patients.

Emergency Medical Technician (EMT) – A clinical grade below that of a paramedic with 4 different levels (1-4). EMT Level 4s are able to place the SGA advanced airway in cardiac arrest patients.

Endotracheal Tube (ETT) – Type of advanced airway that some paramedic staff are able to place.

End-Tidal Carbon Dioxide (ETCO₂) – Measurement of gas exchange in lungs which enables a clinician to accurately tell whether an airway device has been placed correctly, and allows other information such as effectiveness of compressions and ventilations to be ascertained. ETCO₂ measurement is compulsory for patients where an advanced airway has been placed.

Heart Attack Centre (HAC) – Specialist centres in London hospitals to which patients suffering a STEMI are taken directly for angiography and primary Percutaneous Coronary Intervention (pPCI).

Initial rhythm – The rhythm that the heart is in on initial presentation to LAS staff.

Mobile Data Terminal (MDT) – The device used by clinical staff to receive incoming call information and navigate to the location.

Paramedic – A majority of clinical staff are paramedics and are able to perform advanced airway management, cannulation and administration of drugs to cardiac arrest patients.

Patient Report Form (PRF) – The document used by the LAS to record all aspects of patient care and treatment.

Primary Percutaneous Coronary Intervention (pPCI) – A surgical procedure performed at a Heart Attack Centre which seeks to unblock arteries by means of insertion of a catheter into the affected artery and inflating a small balloon to re-open it. The opened artery is then held in place with a small stent.

Recognition of Life Extinct (ROLE) – The LAS will recognise if life is extinct if there are signs unequivocal with life present or there is evidence of a prolonged period of cardiac arrest with no attempt at basic life support (BLS) prior to the arrival of the LAS. ROLE can be used upon arrival of a clearly deceased patient, or after resuscitation has been attempted.

Response Category: R1 – Red 1 is used for calls where the patient is not breathing, and are classed as the most time critical. In line with national definitions, 999 call is the time at which the call is connected to the ambulance service for these calls. Red 1 forms part of a Category A - an immediately life threatening - response.

Response Category: R2 – Red 2 is used for calls where the complaint is serious but slightly less immediately time critical. In line with national definitions, 999 call is defined as the time at which the chief complaint is established or one minute elapses, whichever comes first. Red 1 forms part of a Category A - immediately life threatening - response.

Response Category: C1 to C4 – All other calls are given a Category C response based on the information provided by the caller regarding the patient's condition. The 999 call time definition is the same as R2 calls.

Return of Spontaneous Circulation (ROSC) – Refers to a return of cardiac output by the heart after a period of cardiac arrest. ROSC sustained to hospital is the most widely used measure for out-of-hospital cardiac arrests and indicates the patient had ROSC at handover to hospital staff.

Supraglottic Airway Device (SGA) – Type of advanced airway that all clinical staff from EMT4 upwards have the skill to place.

Survival to Discharge – The patient was successfully discharged from a hospital to a non-hospital environment (therefore excluding transfers from one hospital to another).

Utstein – Refers to the internationally recognised criteria for outcomes. The patients in this group are all witnessed having a cardiac arrest by a bystander, all present with an initially shockable rhythm of VF or pulseless VT and have a presumed cardiac aetiology.

Witnessed – Either seen or heard by a bystander or seen by LAS staff.

Appendix 1: Response times and patient outcomes per Complex

Cluster	Complex	Number of patients	Median times (mins)			ROSC sustained to hospital	Resuscitation attempted survival	Utstein survival
			999 call - scene	999 call - CPR [^]	999 call - Defibrillation [#]			
North West	Hillingdon	152	06:42	08:41	12:21	31.6% (48)	11.4% (17/149)	40.0% (10/25)
	Kenton	209	06:40	08:06	09:36	30.6% (64)	6.3% (13/207)	25.0% (8/32)
	Brent	240	06:56	08:12	10:04	27.9% (67)	12.3% (29/236)	37.0% (10/27)
West	Hanwell	182	06:32	08:07	10:37	33.5% (61)	14.0% (25/179)	28.6% (8/28)
	Isleworth	147	06:46	08:00	10:41	34.7% (51)	11.7% (17/145)	30.4% (7/23)
	Fulham	134	07:04	08:54	12:44	32.1% (43)	9.7% (13/134)	27.8% (5/18)
North Central	Friern Barnet	170	06:47	08:35	11:36	32.4% (55)	9.5% (16/169)	27.3% (9/33)
	Chase Farm	100	06:48	08:00	10:41	27.0% (27)	10.0% (10/100)	57.1% (4/7)
	Edmonton	226	07:01	08:20	13:06	32.3% (73)	8.0% (18/224)	25.9% (7/27)
	Camden**	196	06:38	08:52	11:52	33.2% (65)	14.4% (28/194)	39.3% (11/28)
East Central	City & Hackney	149	06:39	08:05	13:07	25.5% (38)	4.1% (6/145)	4.8% (1/21)
	Newham	133	06:08	07:38	13:36	29.3% (39)	6.8% (9/132)	27.3% (3/11)
	Tower Hamlets	86	06:55	07:57	10:42	31.4% (27)	12.9% (11/85)	54.5% (6/11)
North East	Whipps Cross*	307	06:35	07:55	10:20	33.6% (103)	10.6% (32/301)	29.6% (8/27)
	Romford	217	06:57	08:34	12:39	35.9% (78)	6.7% (14/208)	14.3% (3/21)
South East	Greenwich	202	06:09	07:41	10:42	35.6% (72)	14.9% (30/202)	48.1% (13/27)
	Bromley	202	06:16	08:06	11:20	26.7% (54)	11.4% (23/201)	39.4% (13/33)
	Barnehurst	165	06:43	08:17	11:35	28.5% (47)	12.2% (20/164)	40.0% (8/20)
	Deptford**	302	06:37	08:13	11:26	27.5% (83)	12.6% (37/293)	45.2% (19/42)
South West	New Malden	146	07:00	08:23	13:23	36.3% (53)	8.4% (12/143)	21.1% (4/19)
	St Helier	177	06:15	08:19	12:35	33.9% (60)	12.9% (22/171)	43.8% (14/32)
	Wimbledon	121	05:55	07:13	09:07	34.7% (42)	11.8% (13/110)	33.3% (5/15)
	Croydon	224	06:52	08:08	11:32	26.3% (59)	5.9% (13/220)	23.3% (7/30)

[^] 999 call - CPR calculations exclude arrests witnessed by LAS staff.

[#] 999 call - defibrillation calculations are based on patients with an initial rhythm of VF/VT only.

* Whipps Cross Complex falls under both North East and East Central clusters - but has been included solely under North East in this table.

** Due to Complex mergers part way through the year, Islington Complex figures are included in Camden Complex. Waterloo and Oval Complex figures are included in Deptford Complex.

Appendix 2: Survival per Hospital

Hospital	2011/12 ⁺			2012/13 ⁺			2013/14 ⁺		
	Number of Patients	Survival with ROSC sustained to hospital		Number of Patients	Survival with ROSC sustained to hospital		Number of Patients	Survival with ROSC sustained to hospital	
Barnet	78	7.7% (2/26)		60	10.0% (2/20)		58	24.2% (8/33)	
Central Middlesex	37	10.0% (1/10)		20	0% (0/6)		21	0.0% (0/1)	
Charing Cross	36	30.0% (3/10)		46	33.3% (9/27)		43	47.1% (8/17)	
Chase Farm *	47	23.1% (3/13)		55	8.0% (2/25)		24	36.4% (4/11)	
Chelsea & Westminster	44	27.8% (5/18)		24	17.6% (3/17)		40	25.0% (4/16)	
Croydon	133	25.0% (12/48)		117	14.3% (7/49)		104	6.1% (2/33)	
Darent Valley	17	28.6% (2/7)		17	33.3% (2/6)		15	16.7% (1/6)	
Ealing	56	27.6% (8/29)		63	3.8% (1/26)		76	18.5% (5/27)	
Hammersmith	156	57.5% (46/80)		113	40.5% (32/79)		119	49.4% (40/81)	
Harefield	36	56.7% (17/30)		41	40.5% (15/37)		36	40.0% (12/30)	
Hillingdon	100	18.0% (9/50)		84	33.3% (14/42)		82	29.7% (11/37)	
Homerton	43	11.1% (2/18)		59	23.1% (6/26)		35	10.0% (1/10)	
King's College	159	46.6% (41/88)		180	32.0% (32/100)		181	51.1% (46/90)	
King George	66	10.5% (2/19)		61	6.5% (2/31)		69	16.7% (5/30)	
Kingston	67	20.0% (6/30)		63	9.5% (4/42)		63	4.0% (1/25)	
London Chest	69	66.1% (39/59)		87	45.8% (33/72)		107	47.3% (43/91)	
Newham	103	15.6% (5/32)		88	14.8% (4/27)		81	11.1% (2/18)	
North Middlesex	82	38.2% (13/34)		89	18.9% (10/53)		107	14.3% (6/42)	
Northwick Park	114	13.6% (6/44)		152	7.7% (5/65)		127	9.3% (4/43)	
Princess Royal	79	14.8% (4/27)		64	19.4% (6/31)		87	31.4% (11/35)	
Queen Elizabeth	128	27.3% (12/44)		121	34.5% (20/58)		133	29.6% (16/54)	
Queen's	125	5.3% (2/38)		166	14.9% (7/47)		146	12.3% (7/57)	
Royal Free	89	46.7% (28/60)		115	45.2% (33/73)		129	38.8% (31/80)	
Royal London	92	34.2% (13/38)		98	30.8% (12/39)		100	20.0% (8/40)	
St George's	150	37.4% (34/91)		171	37.9% (36/95)		188	42.6% (46/108)	
St Helier	63	7.1% (2/28)		59	4.3% (1/23)		59	9.1% (2/22)	
St Mary's	62	23.8% (5/21)		68	11.1% (3/27)		73	32.0% (8/25)	
St Thomas'	97	36.6% (15/41)		89	40.0% (16/40)		97	42.0% (21/50)	
The Heart	19	76.5% (13/17)		21	72.2% (13/18)		24	70.0% (14/20)	
University College Hospital	41	33.3% (6/18)		62	28.6% (6/21)		51	42.1% (8/19)	
Lewisham	106	28.2% (11/39)		100	26.7% (8/30)		79	20.8% (5/24)	
West Middlesex	103	20.5% (8/39)		91	25.0% (9/36)		85	29.0% (9/31)	
Whipps Cross	115	18.2% (6/33)		98	7.3% (3/41)		106	21.2% (11/52)	
Whittington	37	22.2% (2/9)		70	31.0% (9/29)		51	19.2% (5/26)	
Other Hospitals	8	0.0% (0/4)		3	-		9	50.0% (2/4)	

+ Denominators exclude patients with unknown survival outcomes.

*Please note that Chase Farm A&E closed on the 9th December 2013.

Appendix 3: Rhythm and survival per Heart Attack Centre for post ROSC patients with a STEMI

Heart Attack Centre	Number of Patients	Initial Rhythm			Survival to discharge ⁺
		Asystole	VF/VT	PEA	
Hammersmith	42	16.7% (7)	66.6% (28)	16.7% (7)	52.5% (21/40)
Harefield	26	26.9% (7)	65.4% (17)	7.7% (2)	42.3% (11/26)
King's College	44	13.6% (6)	77.3% (34)	9.1% (4)	52.3% (23/44)
London Chest	72	12.5% (9)	72.2% (52)	15.3% (11)	36.6% (26/71)
Royal Free	43	9.3% (4)	76.7% (33)	14.0% (6)	47.6% (20/42)
St George's *	37	13.9% (5)	75.0% (27)	11.1% (4)	51.4% (18/35)
St Thomas'	20	10.0% (2)	85.0% (17)	5.0% (1)	58.8% (10/17)
The Heart	13	-	84.6% (11)	15.4% (2)	61.5% (8/13)

* One patient had no initial rhythm documented.

+ Denominators exclude patients with unknown survival outcomes.

Appendix 4: Patient characteristics, response times, and outcomes per Clinical Commissioning Group

Incident CCG	Number of Patients	Age	Male %	Median 999 Call - Scene (mins)	Bystander CPR*	ROSC sustained to hospital	Survived to discharge ⁺
Barking & Dagenham	101	65	63.4% (64)	06:34	51.3% (39/76)	34.7% (35)	8.2% (8/97)
Barnet	200	69	57.0% (114)	07:13	56.9% (95/167)	38.0% (76)	9.0% (18/199)
Bexley	123	72	63.4% (78)	06:44	52.6% (51/97)	33.3% (41)	9.8% (12/123)
Brent	162	67	66.7% (108)	06:52	64.2% (86/134)	26.5% (43)	8.1% (13/161)
Bromley	206	70	61.7% (127)	06:25	50.6% (85/168)	32.0% (66)	15.1% (31/205)
Camden	127	63	66.9% (85)	05:51	58.3% (63/108)	31.5% (40)	18.1% (23/127)
Central London	122	59	74.6% (91)	07:10	59.0% (62/105)	36.1% (44)	14.3% (17/119)
City & Hackney	111	64	64.9% (72)	06:15	63.0% (58/92)	22.5% (25)	3.7% (4/108)
Croydon	190	67	60.0% (114)	06:39	61.0% (94/154)	24.7% (47)	5.3% (10/189)
Ealing	195	65	65.1% (127)	06:42	55.8% (87/156)	32.8% (64)	12.6% (24/190)
Enfield	182	67	62.6% (114)	06:57	56.9% (87/153)	24.7% (45)	8.9% (16/180)
Greenwich	142	65	58.5% (83)	05:59	50.9% (59/116)	31.0% (44)	14.8% (21/142)
Hammersmith & Fulham	72	64	69.4% (50)	06:49	60.0% (36/60)	27.8% (20)	12.5% (9/72)
Haringey	127	63	64.6% (82)	06:57	40.4% (42/104)	33.1% (42)	7.1% (9/126)
Harrow	121	67	64.5% (78)	06:40	55.2% (53/96)	24.8% (30)	7.5% (9/120)
Havering	160	71	58.8% (94)	06:58	56.0% (70/125)	37.5% (60)	9.7% (15/154)
Hillingdon	168	68	63.7% (107)	06:23	58.6% (78/133)	34.5% (58)	10.8% (18/166)
Hounslow	153	64	64.7% (99)	07:15	47.7% (61/128)	34.0% (52)	12.5% (19/152)
Islington	98	60	55.1% (54)	07:11	59.8% (49/82)	38.8% (38)	13.7% (13/95)
Kingston	72	72	69.4% (50)	06:53	49.2% (29/59)	36.1% (26)	7.5% (5/67)
Lambeth	157	63	63.1% (99)	06:38	50.8% (64/126)	25.5% (40)	9.7% (15/155)
Lewisham	116	64	58.6% (68)	06:18	56.4% (53/94)	22.4% (26)	9.6% (11/114)
Merton	91	68	65.9% (60)	06:30	62.5% (45/72)	35.2% (32)	11.8% (10/85)
Newham	161	64	59.6% (96)	06:30	54.3% (70/129)	24.2% (39)	4.4% (7/159)
Redbridge	162	67	65.4% (106)	06:32	66.2% (88/133)	37.0% (60)	9.5% (15/158)
Richmond	63	68	63.5% (40)	07:03	66.1% (37/56)	23.8% (15)	4.8% (3/62)
Southwark	146	64	62.3% (91)	06:48	36.3% (45/124)	26.0% (38)	14.2% (20/141)
Sutton	110	69	60.0% (66)	07:00	59.0% (49/83)	34.5% (38)	12.3% (13/106)
Tower Hamlets	94	63	77.7% (73)	06:09	60.8% (48/79)	37.2% (35)	12.1% (11/91)
Waltham Forest	134	69	60.4% (81)	06:56	60.2% (62/103)	33.6% (45)	10.5% (14/133)
Wandsworth	136	63	63.2% (86)	06:14	56.5% (65/115)	36.8% (50)	11.6% (15/129)
West London	106	67	59.4% (63)	06:42	53.3% (48/90)	26.4% (28)	7.6% (8/105)
Out of London	9	64	55.6% (5)	10:26	100.0% (9/9)	44.4% (4)	0% (0/9)

* LAS staff witnessed arrests are excluded from bystander CPR analysis.

+ Denominators exclude patients with unknown survival outcomes.

Appendix 5: Defibrillators in public places

Across London there are 2,322 active sites where at least one Public Access Defibrillator (PAD) is present for use by members of the public. In 2013/14, there were 27 occasions where the defibrillator was brought to a patient's side for use in cardiac arrest. For 9 cases the defibrillator pads were applied to a patient but no shock given, either due to the presence of a non-shockable rhythm or the arrival of ambulance personnel on scene. The defibrillator pads were applied and at least one shock delivered to 18 patients; further information is presented in the table below.

Patient Demographics	
Number of patients:	18
Average age:	65
Age range:	52-81
Gender:	Male (83.3%; n=15) Female (16.7%; n=3)

Event Information	
Bystander witnessed:	83.3%; n=15
Bystander CPR:	94.4%; n=17
Average number of PAD shocks:	2
Range of PAD shocks:	1-6
ROSC sustained to hospital:	77.8%; n=14
Survival to discharge [†] :	58.8%; n=10/17

[†] Denominator excludes patients with unknown survival outcomes (n=1).

Appendix 6: Cardiac arrest patients under 35 years old

	Under 1	1-8	9-18	19-35
Number of patients:	58	34	29	215
Gender:				
Male	56.9% (33)	58.8% (20)	55.2% (16)	67.0% (144)
Female	41.4% (24)	41.2% (14)	44.8% (13)	33.0% (71)
Unknown	1.7% (1)	-	-	-
Arrest location:				
Private	89.7% (52)	88.2% (30)	62.1% (18)	66.0% (142)
Public	10.3% (6)	11.8% (4)	37.9% (11)	34.0% (73)
Witnessed:				
Bystander	20.7% (12)	26.5% (9)	34.5% (10)	36.3% (78)
LAS staff	8.6% (5)	11.8% (4)	13.8% (4)	13.5% (29)
Unwitnessed	69.0% (40)	61.7% (21)	51.7% (15)	50.2% (108)
Not Documented	1.7% (1)	-	-	-
Bystander CPR*:				
Yes	58.5% (31/53)	53.3% (16/30)	80.0% (20/25)	57.5% (107/186)
No	41.5% (22/53)	46.7% (14/30)	20.0% (5/25)	42.5% (79/186)
Rhythm:				
Asystole	75.9% (44)	82.4% (28)	48.3% (14)	65.1% (140)
PEA	8.6% (5)	11.8% (4)	27.6% (8)	15.4% (33)
VF/ Pulseless VT	-	2.9% (1)	24.1% (7)	18.1% (39)
Not Documented	15.5% (9)	2.9% (1)	-	1.4% (3)
ROSC sustained to hospital:				
Yes	3.4% (2)	5.9% (2)	37.9% (11)	28.8% (62)
No	96.6% (56)	94.1% (32)	62.1% (18)	71.2% (153)
Survived to discharge⁺:				
Yes	5.4% (3/56)	0% (0/34)	14.8% (4/27)	13.4% (28/209)
No	94.6% (53/56)	100% (34/34)	85.2% (23/27)	86.6% (181/209)

* LAS staff witnessed arrests are excluded from bystander CPR analysis.

+ Denominators exclude patients with unknown survival outcomes.

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Category A response times: target 75% within eight minutes

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Enfield	81%	67%	68%	60%	55%	61%
Haringey	76%	62%	64%	58%	57%	55%
Islington	84%	70%	69%	64%	61%	61%
Barking & Dagenham	76%	67%	61%	56%	60%	52%
City & Hackney	81%	68%	68%	66%	64%	63%
Havering	78%	69%	65%	60%	61%	60%
Newham	85%	73%	67%	63%	60%	59%
Redbridge	81%	69%	63%	58%	56%	52%
Tower Hamlets	84%	72%	69%	65%	65%	64%
Waltham Forest	78%	64%	59%	54%	53%	52%
Westminster	85%	77%	74%	73%	67%	70%
Bexley	82%	69%	75%	72%	63%	69%
Bromley	79%	71%	73%	68%	65%	62%
Greenwich	85%	78%	78%	72%	68%	69%
Lambeth	84%	78%	76%	70%	68%	68%
Lewisham	80%	73%	74%	67%	64%	62%
Southwark	85%	77%	76%	72%	69%	69%
Croydon	79%	73%	73%	65%	62%	62%
Kingston	83%	72%	74%	67%	68%	63%
Merton & Sutton	81%	73%	72%	68%	62%	65%
Wandsworth	82%	75%	72%	63%	59%	63%
Brent	78%	66%	64%	60%	56%	57%
Ealing	78%	66%	64%	59%	52%	58%
Hammersmith & Fulham	81%	76%	70%	66%	59%	65%
Harrow	81%	68%	70%	67%	61%	63%
Hillingdon	79%	71%	70%	66%	61%	65%
Hounslow	75%	67%	64%	59%	57%	60%
Kensington & Chelsea	83%	75%	73%	68%	65%	72%
Barnet	76%	63%	62%	58%	54%	56%
Camden	87%	80%	75%	70%	67%	69%
Richmond & Twickenham	78%	67%	67%	60%	55%	59%
out of London or missing map reference	43%					
LAS Total	81%	71%	69%	64%	61%	62%

http://www.londonambulance.nhs.uk/about_us/how_we_are_doing/meeting_our_targets/latest_response_times.aspx

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Highest ever cardiac arrest survival in capital

7 November 2014**People who have a cardiac arrest in the capital are more likely to survive than ever before, according to figures released today by London Ambulance Service.**

Almost a third (32.4 per cent*) of patients whose hearts stopped beating were resuscitated and discharged from hospital last year – the highest survival rate since records began 15 years ago.

Medical Director Fiona Moore said: "Not only are our staff doing an excellent job resuscitating and stabilising patients, but the public are helping to save lives on the streets of London too. We've seen more bystanders than ever before providing basic life support to cardiac arrest patients. Our call takers also do a great job giving instructions over the phone on how to do CPR and use a defibrillator until help arrives."

Last year, bystanders attempted cardiopulmonary resuscitation (CPR) on 55.8% of cardiac arrest patient – up four per cent from the year before.

Fiona added: "This reflects the work we've been doing around the capital to teach Londoners basic lifesaving skills and I'd encourage everyone to learn this vital skill, as you never know when someone might need your help."

"Chances of survival increase considerably when CPR is carried out and it's great news that more people are willing to get involved and help in this way."

Twenty-eight-year-old Paul Cowling (pictured, right) was playing football when he had a cardiac arrest a year ago. He was given CPR by his team-mates until paramedics arrived and shocked him 15 times with a defibrillator to restart his heart.



He said: "It could have been a very different story for me – I'm definitely one of the lucky ones. Since my cardiac arrest, we've learnt basic life support so we know how to help people in the future. I'd urge everyone to do the same so that more lives can be saved."

Paul was diagnosed with dilated cardiomyopathy and fitted with an internal defibrillator, which will restart his heart if it stops again in the future.

The Service's cardiac figures also show that almost a quarter of cardiac arrests happened in a public place and where a defibrillator was used promptly by members of the public the chances of survival increased.

Fiona added: "I'd like to urge Londoners and businesses to get behind our Shockingly Easy campaign to get more of the machines across the capital and help save more lives."

For more information on CPR training or to get a defibrillator for your business call 020 7783 2366 or visit www.londonambulance.nhs.uk/shockinglyeasy

Ends

Notes to editors

- A cardiac arrest is when the heart stops pumping blood around the body. This is different to a heart attack, which is when an artery becomes obstructed, restricting the flow of blood to the heart.
- For further information about this news release please contact the communications department on 020 7783 2286.

***Utstein cardiac arrest survival rate**

Crash24 - Tuesday 6 December 2011

Control room tweetathon - Thursday 4 October

Taking care in the hot weather

Use us wisely

Give blood

Know your blood pressure

The Utstein cardiac arrest survival rate in London in 2013/14 is 32.4 per cent (187 survivors out of 578 cardiac arrest patients), up from 28.4 per cent in 2012/13. This is the highest level it has ever been in London.

Utstein is an internationally-recognised method of calculating out-of-hospital cardiac arrest survival rates and focuses on a subgroup of patients who have the best chance of a successful resuscitation. The calculation takes into account the number of patients discharged alive from hospital who had resuscitation attempted following a cardiac arrest of presumed cardiac cause, and who also had their arrest witnessed by a bystander and an initial cardiac rhythm of ventricular fibrillation or ventricular tachycardia (ie a rhythm that is suitable to shock using a defibrillator).

Overall cardiac arrest survival rate

A total of 436 out of 4,239 cardiac arrest patients who ambulance staff attempted to resuscitate survived to be discharged from hospital (10.3 per cent). This is up from 9.3 per cent in 2013.

Additional figures from London Ambulance Service Cardiac Arrest Annual Report

- Over three quarters of cardiac arrests in London happened in the home (77.7 per cent)
- Almost a quarter of cardiac arrests occurred in public (22.3 per cent)

Of those which happened in public:

- - 461 happened in the street
 - 80 took place at work
 - 75 took place in a healthcare facility eg GP surgery, walk in centre
 - 64 took place on public transport
 - 50 took place at a social venue, eg cinema, pub, restaurant
 - 39 at a hotel or hostel
 - 36 in a shop or bank
 - 34 at a sports or leisure club
 - 23 in parkland or woodland
 - 18 at an airport
- Bystanders attempted basic life support before ambulance staff arrived in 55.8 per cent of cardiac arrests (up four per cent)
- The majority of patients (63 per cent) were men
- The average age of a cardiac arrest patient was 66
- Cardiac arrests happened most commonly between 8am to midday (24.1 per cent)
- Cardiac arrests happened most frequently on a Monday (15.9 per cent)
- Most occurred in the month of December (10.3 per cent)
- Defibrillators in public places
- There are now over 2,000 sites across London with at least one defibrillator.
- Survival from cardiac arrests is highest in leisure centres or sports clubs (44.1 per cent), followed by those that occur at work (33.3 per cent).
- In 2013/14 The London Ambulance Service provided Heartstart training courses teaching basic lifesaving skills to 19,944 people in London.

HEALTHIER COMMUNITIES SELECT COMMITTEE			
Report Title	Public Health Savings Proposals 2015/16 Consultation with Health Commissioners		
Key Decision	Yes	Item No.	8
Ward	All		
Contributors	Executive Director for Community Services, Director of Public Health		
Class	Part 1	Date:	2 December 2014

Reason for Urgency

The report has not been available for 5 clear working days before the meeting and the Chair is asked to accept it as an urgent item. The report was not available for despatch on Thursday 20 November due to it requiring additional legal input prior to publication. The report cannot wait until the next meeting due to the Council's savings programme timeframes.

1. Purpose

- 1.1 The purpose of this report is to seek the Healthier Select Committee's agreement to the consultation process outlined in the attached paper. It is proposed to consult with Lewisham Clinical Commissioning Group (CCG) in relation to all public health savings proposals 2015/16. The feedback from this consultation will inform the Council's budget setting process for 2015/16.

2. Recommendation

- 2.1 Members of the Healthier Communities Select Committee are asked to comment on the proposed consultation process and timescales.

3. Policy Context

- 3.1 Under the Health and Social Care Act, the majority of public health responsibilities and functions transferred to the Council on 1 April 2013. This included all public health staff and the majority of contracts for commissioned public health functions.

4. Background

- 4.1 The Public Health Budget has been ring-fenced by central government to be spent on agreed public health outcomes since the service moved into the local authority in April 2013. This ring-fence remains in place throughout 2015/16.
- 4.2 Lewisham Council has to make savings of £85m over the next 3 years. Since April 2013 the public health services and current staffing structure have been reviewed. It was felt as a result that savings could be identified in the current spend which could then be used to support council wide service provision where reduction in council spend will have a likely adverse impact on public health outcomes. £1.5m of initial savings were identified which could be made with minimal impact through efficient use of resources and using an uplift to the public health grant received 14/15. A further £1.15m has been identified which requires some reconfiguration of services but which can still be delivered without impacting unduly on front line public health delivery.

5. The approach to the identified savings:

- 5.1 The approach to identifying the savings has been:-
- 1) To identify any duplication with aspects of other council roles which can therefore be combined or streamlined.
 - 2) To identify any service which should more appropriately be carried out by other health partners.
 - 3) To stop providing service level agreements or incentive payments to individual GP practices and develop those services more efficiently and equitably across the four GP neighbourhood clusters where appropriate.
 - 4) To gain greater efficiency through contract pricing where applicable.
 - 5) To integrate public health grants to the voluntary sector into the Council's mainstream grant aid programme.

6. Impact on provider organisations:

- 6.1 The Lewisham and Greenwich Healthcare NHS Trust (LGT) are contracted to provide a number of the public health services identified for service reduction.
- 6.2 The public health services delivered by the LGT are specified in the CCG's contract with the Trust as a whole. The latter includes all acute and community based provision delivered by the Trust.

- 6.3 The Council currently has a Section 75 agreement with the Lewisham CCG detailing the specification for public health delivery within the overall LGT contract. The Council could in future decide to contract these services separately. At this point six months notice would need to be given to the Trust. The Council would then recommission these services in accordance with the Council's contract procedure rules. This will mean that the ongoing service provision/commissioning would be open to competition.
- 6.4 It would not be feasible to re-let the public health element of the LGT contract at this point to deliver the savings for 2015/16 given the logistics required to test the market, assess TUPE and other resource/asset implications. The savings outlined can be found within the existing contract by negotiating a reduction in the overhead and management costs with the existing provider.
- 6.5 The development of neighbourhood working is providing an infrastructure in the community which will be able to better coordinate and streamline management of services at the frontline. A reduction in the specified contract costs can be delivered without impacting unduly on the quality and level of provision as the public health programme will benefit from the neighbourhood model infrastructure.
- 6.6 The Government have agreed Lewisham's Better Care Fund (BCF) programme which builds increased community based health provision in the borough, thus enabling the acute sector to be able to focus on planned hospital admissions and reduce the number of emergency and unnecessary hospital stays. Once the BCF programme is established in full in 15/16 it will then be possible to evaluate whether the public health LGT provision should remain as part of the Trust's community provision or be provided in an alternative way.
- 6.7 Historically Public Health have grant aided a number of voluntary sector organisations to contribute to public health outcomes. As part of the Council's grant aid funding consultation with the voluntary sector 2015-18 it was made clear that public health grant funding to the voluntary sector would not extend beyond July 2015. Organisations in receipt of public health grants will now be able to apply to the Council's mainstream grant programme to continue this work or incorporate it into their ongoing council grant aided programme.
- 6.8 The outcome of the Voluntary Sector grant aid consultation was reported and agreed by the Mayor and Cabinet/Contracts on 12th November 2014. The Safer Stronger Select Committee also considered the consultation feedback at the meeting on 3rd November 2014.
- 6.9 The overall level of the Council's grant aid programme will be agreed in February 2015 as part of the Council's budget setting process and allocation to the individual organisations agreed in May 2015.

- 6.10 Some GP practices have received payments to deliver public health clinical service including NHS health checks and sexual health services. These will continue with the exception of the incentive payment for chlamydia and gonorrhoea screening.
- 6.11 Other surgeries have benefited from public health funded programmes delivered in their surgeries by other organisations. These will in the future (from April 2015) be delivered on a neighbourhood basis. This work will be incorporated into the work of the four neighbourhood community based teams which should then benefit all GP practices. Individual GPs have been notified of this intention.

7. Staff Reorganisation

- 7.1 One of the savings identified and to be achieved is through a staff reorganisation.
- 7.2 These savings will be achieved where there is potential duplication with other council services and roles can therefore be streamlined and operate more efficiently.
- 7.3 Staff reorganisation proposals will be produced in January 2015 and will be subject to consultation.

8. Consultation Process

- 8.1 The attached consultation is with health commissioners and will take place in the context of established good practice in existence in other areas which has delivered, or is likely to deliver, the efficiencies and savings we need to achieve In Lewisham.
- 8.2 The savings proposals themselves have had pre-scrutiny consideration by: The Children & Young People's Select Committee, The Healthier Communities Select Committee, and the Public Accounts Committee.
- 8.3 The savings proposals have also been discussed at partnership meetings with the CCG and Lewisham and Greenwich Trust.
- 8.4 The CCG will receive the consultation document by email and will have 2 weeks to respond on the Public Health savings proposals with the opportunity to comment upon procurement changes and impact on service providers.
- 8.5 Any other responses from discussion with partner organisations will be analysed to establish whether any changes need to be incorporated into the procurement specification for the ongoing service provision.

- 8.6 Where the Council wishes or needs to re-commission any services to achieve the required economies, then it will do so in accordance with the Council's contract procedure rules. This will mean that the ongoing service provision/commissioning is open to competition.
- 8.7 As part of the process, the Director of Public Health will form a view as to whether the required service changes constitute a substantial development or variation in the service(s) so as to require formal consultation as to the impact of the proposed changes.
- 8.8 The outcome of this and any new service proposals will be reported to the Healthier Communities Select Committee, as well as to the Health & Wellbeing Board and a cross select committee Task & Finish Group.
- 8.9 The responses to any consultation and subsequent responses by the Healthier Communities Select Committee, the Health and Wellbeing Board and the Task & Finish Group together with the proposals for the new service configuration will then be considered by Mayor and Cabinet.

9. Financial implications

- 9.1 The savings proposals discussed in this report are part of the overall savings requirement of £85m over the next 3 years.

10. Legal implications

- 10.1 Following the implementation of the Health and Social Care Act 2012 the Council became responsible for the delivery of significant public health duties as set out in this report. As such the Councils' delivery of those services is subject to scrutiny in accordance with the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013.
- 10.2 The Healthier Communities Select Committee exercises the Health scrutiny function in Lewisham, and will form part of the necessary consultation should the required service changes constitute a substantial development or variation in the service(s).
- 10.3 The Healthier Communities Select Committee can require any officer with responsibility for the provision of health services, including those provided by the Council as part of its new role pursuant to the 2012 Act, to appear before it to answer any questions necessary for the Committee to carry out health scrutiny.
- 10.4 Any procurement resulting from the proposals set out in this report will be conducted in accordance with the Councils own contract procedure rules, with which the Council must comply.

11. Crime and Disorder Implications

- 11.1 It is not possible to fully assess the Crime and Disorder Implications without knowing how the proposed savings will be re-invested in public health.

12. Equalities Implications

- 12.1 It is not possible to fully assess the Equalities Implications without knowing how the proposed savings will be re-invested in public health, and how the services will be reconfigured.

- 12.2 A full EAA will be completed as part of the procurement process.

13. Environmental Implications

- 13.1 It is not possible to fully assess the Environmental Implications without knowing how the proposed savings will be re-invested in public health.

14. Conclusion

- 14.1 The consultation document describes the proposed process to achieve the public health savings proposals for the 2015/2016 financial year, and sets out the Committee's role in that process.

If there are any queries on this report please contact **Dr Danny Ruta, Director of Public Health**, 020 8314 ext 49094.

Public Health Savings Proposals 2015/16 Consultation with Health Commissioners

Part 1 – About this Consultation

Purpose of this Consultation

1. This consultation is about the proposal to make savings on some public health programmes following a review of all Public Health current expenditure.
2. £1.5M of initial savings were identified which could be made with minimal impact through more efficient use of resources and through using an inherited uplift to the public health grant. A further £1.15m has been identified which will require a more substantial reconfiguration of public health services but which nevertheless is anticipated to be achievable without impacting unduly on frontline public health delivery. This would however require a commitment from schools to both engage in health improvement programmes and contribute financially.

Audience

3. This consultation is with Health Commissioners, namely the Lewisham Clinical Commissioning Group. A key partner in this consultation is the Clinical Commissioning Group. The following providers are affected by the proposals
 - Lewisham and Greenwich NHS Trust (LGT)
 - Voluntary Action Lewisham (VAL)
 - Lewisham Citizens Advice Bureau (CAB)
 - Sydenham Gardens
 - Federation of Vietnamese Refugees in Lewisham (FORVIL)
 - Lewisham Refugee and Migrant Network (LRMN)
 - Downham Nutrition Partnership (DNP)
 - 170 Community Project
 - GPs who will be directly affected by proposed savings

All providers have been made aware of these proposals (please see Impact on Providers in accompanying report).

Progress to date

4. The savings proposals have had pre-scrutiny consideration by the following council select committees:

Date	Meeting	Partners present
2 October 2014	Children and Young Peoples Select Committee	
21 October 2014	Healthier Communities Select Committee	Lewisham CCG Lewisham & Greenwich NHS Trust Healthwatch South London and Maudsley NHS Trust
5 November 2014	Public Accounts Committee	

5. The savings proposals have also been discussed at partnership meetings with the CCG and Lewisham and Greenwich Trust, and several voluntary organisations.
6. In addition, Lewisham and Greenwich Trust were broadly informed of the proposed changes in the Commissioning Intentions letter, dated 30th September 2014, sent to the Trust by Lewisham Clinical Commissioning Group, regarding Sexual Health Services, Stop Smoking Services and the Community Health Improvement Service. It is not felt that the proposals themselves constitute a substantial variation in contract as they largely involve a re-organisation of service delivery as part of the newly developed neighbourhood working. The latter already involves Lewisham & Greenwich NHS Trust as well as primary care providers, adult social care and key voluntary sector organisations.
7. On Nov 12th the Mayor & Cabinet agreed that a period of consultation should be undertaken. The consultation will be considered by the Healthier Communities Select Committee and the Health and Wellbeing Board as well as a cross select committee Task & Finish Group. The final budget decisions will be recommended by Mayor & Cabinet in Feb 2015 and agreed subsequently as part of the budget for 15/16 by full council.

How to Respond and Duration

8. The CCG will receive this consultation document and covering letter by email at the beginning of the consultation period.
9. Organisations may submit their response by email to pauline.richards@lewisham.gov.uk by two weeks after receipt of email.
10. The consultation period reflects the fact this is a limited consultation and the information has been in the public domain for over a month already to enable partner organisations to familiarise themselves with the proposals before engaging in the consultation process. The CCG have already identified an intention to negotiate public health costs as part of their commissioning intention 2015/16.

After the Consultation

11. The Public Health Savings are part of an overall process to achieve savings of £85M. These proposals will need to be agreed by the Mayor and Cabinet and subsequently by full council in order to set the budget in February 2015 for the 2015/16 financial year.
12. The responses to the consultation will be reported to the Healthier Communities Select Committee and the Health & Wellbeing Board. Both the response to the consultation and subsequent responses by the Healthier Communities Select Committee and the Health & Wellbeing Board as well as proposals from the Task & Finish group will then be considered by Mayor & Cabinet.

Part 2 - Background

13. Lewisham Council has to make savings of £85m over the next 3 years.
14. The Public Health Budget is ring fenced until at least the end of 2015/2016. The Council is required to file annual accounts to Public Health England on how the Council's public health allocation is spent against pre-determined spending categories linked to public health outcomes and mandatory functions.
15. Where savings have been identified from the current public health budget these will be used to support public health outcomes in other areas of the council. The guiding principle for the re-investment will be to support areas where reductions in council spend will have an adverse impact on public health outcomes.
16. The Public Health programmes which transferred to Lewisham Council in April 2013 have all been reviewed. This review identified an initial £1.5M of savings which could be delivered largely through efficiencies and using the uplift applied to the public health budget in 2014/15. A further disinvestment of £1.15M was also identified, although it was acknowledged that this could have some negative impact unless the service delivery models were re-configured in some instances.
17. The savings achieved will then be reinvested into other areas of council spend where budget reductions may adversely impact on public health outcomes. Any re-allocation in other areas of council spend must have an equal or greater public health impact.
18. The mandatory public health services that were identified in the Department of Health policy paper: *Healthy Lives, Healthy People: update and way forward* are:
 - Appropriate access to sexual health services
 - Steps to be taken to protect the health of the population, in particular, giving the local authority a duty to ensure there are plans in place to protect the health of the population
 - Ensuring NHS commissioners receive the public health advice they need
 - The National Child Measurement Programme
 - NHS Health Check Assessment.

The approach to the identified savings:

The approach to identifying the savings has been:-

The approach to identifying the savings has been:-

- 1) To identify any duplication with aspects of other council roles which can therefore be combined or streamlined.
- 2) To identify any service which should more appropriately be carried out by other health partners.

- 3) To stop providing service level agreements or incentive payments to individual GP practices and develop those services more efficiently and equitably across the four GP neighbourhood clusters where appropriate.
- 4) To gain greater efficiency through contract pricing where applicable.
- 5) To integrate public health grants to the voluntary sector into the Council's mainstream grant aid programme.

Part 3 – The Proposal

19. The programmes where savings are proposed include the following:

Dental Public Health; Health Inequalities; Mental Health (adults and children); Health Protection; Maternal and Child Health; NHS Health Checks; Obesity/Physical Activity; Sexual Health.; Smoking and Tobacco Control; Training and Education.

20. Substance misuse services (which are funded from part of the ring fenced grant) have been reviewed separately and are accounted for in the crime reduction proposed savings.
21. The savings proposals are presented in table 1 below. Initially savings were presented in 2 separate templates for the Healthier Communities Select Committee, but for simplicity they are merged into one in the table below.
22. It is proposed that the London Borough of Lewisham, as the commissioner of these services, will work closely with the provider of services on planned service re-configuration, in order to mitigate the impact of any service changes, maximise the efficiency and effectiveness in service delivery and to optimise value for money.

Part 4 – Consultation Questions

23. To support the decision making process partners and providers are being consulted specifically in relation to following questions:
 1. **What impact do the proposals have on the ability of partners to deliver their own health improvement activities?**
 2. **Are there any commissioning plans, service reconfigurations in partner organisations which may impact on the ability of the council to deliver the savings proposed?**
 3. **Are there any further mitigating actions which partners could suggest which may support the Council to minimise any adverse impact of the proposals without incurring additional costs.**

Table 1 Public Health Savings Proposals

Public Health Programme Area	Total Budget	Total Saving	Proposals	Service re-design where applicable	Risk & Mitigation
Sexual Health	£7,158,727	£321,600	<ol style="list-style-type: none"> 1. Re-negotiation of costs for sexually transmitted infection testing with LGT in 2015/16, including application of a standard 1.5% deflator to the contract value as an efficiency saving, and inclusion of laboratory costs in the overall contract (£275.6k). 2. Reduce sex and relationships (SRE) funding and develop a health improvement package that schools can purchase that includes SRE co-ordinated and supported by school nursing (£20k) 3. Remove incentive funding for chlamydia and gonorrhoea screening in GP practices (£26k) 	<p>These proposals do not rely on any major service re-design but in the medium term the development of a neighbourhood model of sexual health will lead to improved services.</p> <p>In the short to medium term the development of a neighbourhood model of sexual health provision will lead to improved services. This will be considered as part of a sub-regional review of provision in 15/16. A London-wide sexual health etc In the longer term a London wide sexual health transformation programme is being developed in</p>	<p>The risk would be that LGT cannot deliver the same level of service within reduced funding, and GPs disengage with sexual health. Mitigation includes work with primary care to deliver sexual health services in pharmacy to provide free training to GPs and practice nurses to maintain the current level of provision</p> <p>The second risk is that SRE is not delivered in schools. Mitigation includes developing a health improvement package that schools can purchase that includes SRE, and work with school nursing to support schools to</p>

				partnership with 20 boroughs, which is expected to deliver greater benefit at reduced costs.	provide quality SRE
NHS Health checks	£551,300	£157,800	<ol style="list-style-type: none"> 1. Removing Health checks facilitator post 2. Pre- diabetes intervention will not be rolled out 3. Reduced budget for blood tests due to lower take up for health checks than previously assumed 4. Reducing GP advisor time to the programme 5. Reduction in funding available to support IT infrastructure for NHS health checks 	An essential component of the NHS Healthchecks programme is delivered through the Community Health Improvement Service. See proposed re-commissioning and service re-design under 'health inequalities' below.	<p>Missed opportunity to prevent diabetes and for early diagnosis of diabetes</p> <p>IT system not able to deliver requirements of the programme</p> <p>Future plans to align commissioning of NHS Health Checks with Neighbourhoods will help to optimise the efficiency and effectiveness of resources and may identify more people at risk earlier</p>
Health Protection	£35,300	£12,500	Stop sending the recall letter for childhood immunisations (as this is already done via GPs)		<p>Minimal as impact of letter on uptake appears to be low.</p> <p>Uptake of childhood immunisations continues to be monitored.</p>

Public Health Advice to CCG	£79,200	£19,200	Decommissioning diabetes and cancer GP champion posts.		These posts will be commissioned by the CCG in future
Obesity/ physical activity	£650,000	£173,400	<ol style="list-style-type: none"> 1. Decommission Hoops4health (£27,400) 2. Changing delivery of Let's Get Moving GP & Community physical activity training (£5,000) 3. Decommissioning Physical Activity in Primary Schools (£50,000) 4. Reduce funding for community development nutritionist (£30k) 5. Remove funding for obesity/ healthy eating resources (£10K) 6. Withdraw of funding for clinical support to Downham Nutritional Project (£9k) 7. Efficiency savings from child weight management programmes. (£12k) 8. Reduce physical activity for health checks programme (£20k) 		<p>There is a risk of reduction of physical activity in schools.</p> <p>Mitigation includes Schools being encouraged to use their physical activity premium to continue programmes selected from a recommended menu of evidence based activities.</p> <p>The risk is a reduction in support to voluntary sector healthy eating and nutrition programmes.</p> <p>Mitigation includes organisations being encouraged to build delivery into their mainstream funding programme.</p>
Dental public health	£64,500	£44,500	Release funding from dental public health programmes	Dental public health services commissioned	Sufficient resource retained to assure

				by NHS England	dental infection control function.
Mental Health	£93,400	£59,200	<ol style="list-style-type: none"> 1. Withdraw funding for clinical input to Sydenham Gardens 2. Reduce funding available for mental health promotion and wellbeing initiatives (including training) 		<p>The risk is that Sydenham Gardens is unable to sustain clinical input from grant funding, but it is agreed to direct them to alternative funding sources.</p> <p>The risk is a reduction in mental health awareness training across the borough.</p> <p>Mitigation includes pooling resources with neighbouring boroughs for delivery of training and work closely with voluntary sector and SLAM to deliver mental health awareness training and campaigns.</p>
Health Improvement Training	£88,000	£58,000	<ol style="list-style-type: none"> 1. Decommission Health Promotion library service 2. Limit health improvement training offer to those areas which support mandatory public health services. 		<p>The risk is reduced capacity to develop a workforce across partner organisations which contributes to</p>

					public health outcomes. Mitigation includes working with CEL to develop new models of delivery for essential public health training.
Health inequalities	£1,460,019	£581,500	<ol style="list-style-type: none"> 1. Reconfiguring LRMN Health Access services to deliver efficiencies (£21,500) 2. Remove separate public health funding stream to VAL (£28,000) 3. Decommissioning FORVIL Vietnamese Health Project (£29,000) 4. Reducing funding for Area Based Programmes (£40,000) 5. Decommissioning CAB Money Advice in 12 GP surgeries (£148,000) 6. Reduce the contract value for community health improvement service with LGT and working with the Trust to reorganise how that services can be delivered more cost effectively by linking the delivery of the programme into community based neighbourhood model (£270k) 7. Further reduce funding for area based public health initiatives which are focused on geographical areas of poor health with in the borough. (£20k) 8. Reduce funding for 'warm homes' (£25K) 9. Grant money was given to 'Warm Homes' for year 2013/14. This was extended for a further year to enable more homes to be insulated. It is proposed that the grant be downsized. 	It is proposed to integrate a number of community based health improvement programmes, including those funded by the GLA (e.g. Bellingham Well London) with the health and social care activities currently being developed in these neighbourhoods by the Community Connections team, District Nurses, Community Health Improvement Service, Social Workers and GPs. There is also a plan to develop a stronger	<p>The risk is reduced capacity across the system to tackle health inequalities, and a reduction in service for the most vulnerable.,</p> <p>Mitigation includes working with the Adult integrated Care Programme to deliver a neighbourhood model for health inequalities work, and develop local capacity.</p> <p>It is anticipated that basing these services directly in the community and with greater integration will accommodate the funding reduction.</p>

				partnership working with Registered Social Landlords as well as any local regeneration projects in each of these neighbourhoods.	Voluntary organisations will have an opportunity to continue some of this work in a different way through the grant aid programme.
smoking and tobacco control	£860,300	£348,500	<ol style="list-style-type: none"> 1. Reduce contract value for stop smoking service at LGT by £250k (30%) 2. Stop most schools and young people's tobacco awareness programmes 3. Decommission work to stop illegal sales 	There are proposals to re-configure the stop smoking service as part of the neighbourhood developments described under 'health inequalities' above.	<p>There is a risk of a reduction in number of people able to access stop smoking support and an increase in young people starting smoking if services are not –reconfigured appropriately.</p> <p>Mitigation includes optimising efficiencies in the delivery of the SSS and reducing the length of time smokers are supported from 12 to 6 weeks to release capacity. Schools will be able to fund some of the peer education non-</p>

					smoking programmes as part of the menu of programmes. The restructuring of enforcement services is likely to allow tackling illegal sales of tobacco in a more integrated way with the same outcomes and prevent young people having access to illegal tobacco.
Maternal and child health	£187,677	£68,400	<ol style="list-style-type: none"> 1. Reducing sessional funding commitment for Designated Consultant for Child Death Review 2. Reduce capacity for child death review process by reducing sessional commitment of child death liaison nurse. 3. Removal of budget for school nursing input into TNG 		<p>There may be less opportunity to learn from and improve services for families which have been bereaved, but this is not the purpose of the panel and there will be no impact on prevention of child deaths.</p> <p>The school nursing service received grant funding of £250k in 2014/15 which has not been reduced, and the</p>

			4. Reduce capacity/funding for breast feeding peer support programme & breast feeding cafes.		<p>service will be able to accommodate input into TNG.</p> <p>There is a risk that women will be less well supported to breast feed and Lewisham may not achieve UNICEF/WHO Baby Friendly status in 2015.</p> <p>Mitigation will include re-negotiating support through the maternity services contract, although this may not be achievable in time for 2015 contracts. Baby café licences may be re-negotiated.</p>
Department efficiencies		£262,200	To be identified through a staff restructure in 2015. At this point public health staff terms and conditions and pay scales are to be harmonised with council staff terms and conditions and pay scales.		
2014/2015 Uplift (uncommitted)		£547,000			
TOTAL	£14,995,000	£2,653,800			