The shape of things to come

Consultation on developing new, high-quality major trauma and stroke services in London

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Last Date Revised: 23/01/09
Version: 0.18
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Introduction to the consultation – a summary

“London is one of the greatest cities in the world. We believe Londoners deserve the very best healthcare system in the world and we want to develop a service that meets your needs and expectations. Setting our sights on providing the best healthcare in the country is not enough.”

Consulting the Capital, Nov 2007

Healthcare for London: A Framework for Action set out an ambitious vision. This consultation proposes some of the first steps we would like to take in making this vision a reality – stroke and trauma services delivered to the highest standards across the capital.

Every year, thousands of people in London suffer a stroke or a major trauma injury. These patients need high quality specialist care to give them the best chance of survival and a speedy recovery. Currently, the standard of care varies considerably across London. Whilst some people receive good quality care, far too many are missing out.

The clinical evidence behind our plans for new major trauma and stroke services is clear. We believe the proposals could save up to 500 lives a year and significantly reduce disability for thousands of others. No change is not an option.

Local NHS organisations, supported by Healthcare for London, are consulting now because we want to deliver new specialist major trauma and stroke services for all Londoners. We want everyone to receive the best quality care and we want to provide services where they are most needed.

We are proposing new trauma networks based around three or four new major trauma centres. These centres would provide 24 hour, seven days a week specialist emergency care for people with the most serious injuries. People with less serious injuries would be treated in trauma centres at all other accident and emergency (A&E) departments. Our proposals would ensure faster access to specialist care – all Londoners would be within 45 minutes ambulance journey of a major trauma centre.

We are proposing specialist stroke services with the highest standards of care be available to everyone in London. All stroke patients would be taken by ambulance to one of eight new hyper-acute stroke units where they will be assessed and treated within 30 minutes. Once stabilised, patients would be cared for in dedicated, local stroke units for continued specialist treatment and rehabilitation. More and better trained doctors, nurses and therapists will be needed to deliver new stroke services. A small number of hospitals that currently treat stroke patients may not continue providing these services.

Local NHS organisations in London plan to start introducing new trauma networks and new stroke services from early 2010. We are proposing to invest about £9 - £12 million in new trauma networks; and over £23 million in new stroke services.

This is your chance to have your say about stroke and major trauma services in London by completing the questionnaire at the end of this document. You don’t have to live in London to take part. However, if you live or work in London, visit or live nearby, we are particularly keen to hear your views.
Signed by the chairs of all consulting primary care trusts: 30 January 2009

Maureen Worby, NHS Barking & Dagenham I David Riddle, Barnet Primary Care Trust I Barbara Scott, Bexley Care Trust I Marcia Saunders, NHS Brent I Elizabeth Butler, NHS Bromley I John Carrier, Camden Primary Care Trust I Jane Winder, City and Hackney Teaching Primary Care Trust I Toni Letts Croydon, Primary Care Trust I Philip Young, (acting Chair) NHS Ealing I Caroline White (acting Chair), Enfield Primary Care Trust I Michael Chuter, Greenwich Teaching Primary Care Trust I Jeff Zitron, NHS Hammersmith and Fulham I Richard Sumray, NHS Haringey I Dr Gillian Schiller, Harrow Primary Care Trust I Dr A Aggarwal, NHS Havering I Mike Robinson, Hillingdon Primary Care Trust I Sarah Cuthbert, NHS Hounslow I Paula Kahn, NHS Islington I Peter Molyneux, NHS Kensington & Chelsea I Neslyn Watson-Druee, Kingston Primary Care Trust I Caroline Hewitt, Lambeth Primary Care Trust I Michael Richardson CB, Lewisham Primary Care Trust I Marie Gabriel, Newham Primary Care Trust I Edwin Doyle, NHS Redbridge I Sian Bates, Richmond & Twickenham Primary Care Trust I Mee Ling Ng, Southwark Primary Care Trust I Derek Morrison, NHS South West Essex I Kay Sonneborn, Sutton & Merton Primary Care Trust I Stephen O’Brien, Tower Hamlets Primary Care Trust I Afzal Akram, NHS Waltham Forest I Ian Reynolds, Wandsworth Primary Care Trust I Joe Hegarty, NHS Westminster

This consultation is managed by the 31 primary care trusts (PCTs) in London and South West Essex PCT. Primary care trusts are local NHS organisations which buy (commission) and provide healthcare services, such as GP services, hospital services and community care, for their local community.

Working with the London Ambulance Service

Our proposals have been developed with the London Ambulance Service (LAS). We will be working together to improve services and provide training for ambulance staff to assess and treat patients needing specialist major trauma or stroke care to ensure patients are transported to the most appropriate hospital.

“The London Ambulance Service has been steadily improving response times so that on average, we are reaching our most severely ill and injured patients faster than ever before. For example, in 2007/08 we reached over 20,000 more seriously ill or injured patients than in 2005/06.

Our staff are already trained and able to deliver the changes to support Healthcare for London’s proposals on stroke. We are working with colleagues in different parts of the NHS to meet the challenges posed in offering world class care to patients with major trauma in London. This will include

- better identifying major trauma calls when we receive them
- deploying highly skilled teams to the scene to deliver the most appropriate care, and
- conveying each patient to the centre at which they will receive the most appropriate, specialist care.”

London Ambulance Service

What is major trauma?
The term ‘major trauma’ is used to describe the most severe life-threatening injuries, or when people suffer from multiple injuries. It can include arm or leg amputation, severe knife and gunshot wounds, a major head or a spinal injury.

What is trauma?
Trauma is less severe and includes injuries such as a fractured hip or ankle or minor head injury.
What is a trauma network?
A trauma network comprises a major trauma centre which is linked to a number of trauma centres. A major trauma centre will receive the most severe trauma cases. People with less severe injuries will be treated in trauma centres at A&Es. A range of rehabilitation services will be provided in each network.

What is a stroke?
A stroke is a type of brain injury. There are two types of stroke. Almost three quarters of all strokes are ischaemic\(^1\), caused when blood flowing to the brain is blocked. The other type of stroke is when blood vessels burst – this is called haemorrhagic.

Strokes usually occur without warning. Both types of stroke reduce the blood supply to the brain which causes brain cells to die, so quick action is needed to stop further brain injury.

What is a ‘mini stroke’ or TIA?
A transient ischaemic attack (TIA) happens because of a temporary lack of blood to part of the brain and causes short-term problems. A TIA is sometimes called a ‘mini stroke’ but, unlike a stroke, the symptoms do not last and patients recover within a few hours. However, one in ten patients go on to have a full stroke within a week of having a TIA.

How can I avoid a stroke?
Many strokes are preventable, particularly by lowering blood pressure. Simple steps can help reduce your risk:
- stop smoking – smoking can double your risk of having a stroke;
- eat healthily – eat five portions of fruit and vegetables a day and reduce your salt intake;
- drink alcohol sensibly – drinking too much alcohol raises your blood pressure;
- exercise more – exercise helps lower your blood pressure;
- get your blood pressure checked.

How do I recognise a stroke?
Because time is critical in stopping brain cells dying following a stroke, it is helpful to be able to recognise the symptoms. A ‘FAST’ test will help you decide if a person has had a stroke:

Facial weakness – can the person smile? Has their mouth or eye drooped?
Arm weakness – can the person raise both arms?
Speech problems – can the person speak clearly and understand what you say?
Time to call 999. If the person has failed any one of these tests, you should call an ambulance.

For more information or advice about stroke, contact The Stroke Association helpline on 0845 3033 100 or visit www.stroke.org.uk

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\(^1\) South London Stroke Registry, London
Background

In July 2007, NHS London published a report, Healthcare for London: A Framework for Action, written by Professor Lord Darzi. This set out an ambitious vision: to prevent ill health; to reduce inequalities; to make services more accessible; and to ensure consistently high-quality of care for all Londoners when they become ill.

A public consultation, Consulting the Capital, based on this vision, ran from November 2007 to March 2008. It described ways in which health services in London could be improved over the next ten years. In particular, the consultation proposed more specialised care to treat the urgent care needs of patients suffering a major trauma or stroke.

Responses to the consultation showed there was strong support for specialisation of these services. Sixty-four per cent of respondents agreed with the idea of specialised trauma centres and 67% agreed with specialised stroke centres.

In June 2008, based on the results of the consultation, a Joint Committee of PCTs (JCPCT) agreed:

- “To develop some hospitals to provide more specialised care to treat the urgent care needs of trauma (severe injury) patients – probably between three and six hospitals. The number and location of these hospitals should be subject to a further consultation by PCTs.”

- “To develop some hospitals to provide more specialised care to treat the urgent care needs of patients suffering a stroke (about seven hospitals in London providing 24/7 urgent care, with others providing urgent care during the day). The number and location of these hospitals should be subject to a further consultation by PCTs.”

Our proposals for developing new major trauma and stroke services have been developed based on clinical evidence and examples of best practice. There has been extensive discussion with clinicians, stakeholders, patients and the public. The proposals have received widespread support. We have also taken into account comments made in Consulting the Capital, including concerns about travel times.

Prevention and rehabilitation services

This consultation is focusing primarily on the acute part of stroke and trauma service delivery – services provided in hospitals.

Healthcare for London, together with local NHS organisations, is developing plans to prevent illness or injury and to help people get back to leading as full and active lives as possible following a major trauma injury or stroke (this is called rehabilitation).

Preventing major trauma: The two biggest causes of major trauma injuries are road accidents and assault. A London-wide approach to preventing serious injuries from occurring will save lives and reduce long-term disability.

Improving major trauma rehabilitation care: In the future, proposed trauma networks will ensure severely injured patients receive personal rehabilitative assessment and treatment earlier than they do at the moment. This will minimise any potential disability.

Preventing stroke: Local NHS organisations will help people live healthily, and make them aware of how to avoid and recognise a stroke.
Improving stroke rehabilitation care: Guidance on community rehabilitation services has been developed to help local NHS organisations buy (commission) services that patients and carers find easy to use and that meet their needs. This will improve the quality and consistency of services across London.

Does this consultation affect patients from outside London?
About 80 major trauma patients and 1,200 stroke patients from outside London are admitted to London hospitals each year.

Neighbouring strategic health authorities, local NHS organisations and ambulance services have been engaged in planning for improved major trauma and stroke services in London. We believe that patients from outside London will benefit from the improved standards of care that are being proposed.

Wherever you live, if you believe you could be affected by the proposals you are encouraged to make your views known by completing the questionnaire at the back of this document.

What services are provided outside of London?

East of England:
Currently Addenbrookes Hospital in Cambridge provides major trauma services similar to those proposed for London. An East of England integrated trauma system is proposed. Possible arrangements are being considered and will be developed with stakeholder engagement. The trauma system could include a regional major trauma centre, supported by trauma centres and emergency departments. The trauma system will start to develop in 2009/10.

New 24/7 thrombolysis (clot-busting drug) services are being introduced in most hospital trusts in East of England. There will be a phased introduction over 2009/10, building on current services.

South Central:
Currently the John Radcliffe Hospital in Oxford and Southampton General Hospital provides major trauma services similar to those proposed for London.

There are 14 acute/combined stroke units within South Central. It is planned that all stroke units will meet the quality markers and standards for stroke care as set out in the National Stroke Strategy. The future development and implementation of telemedicine will support the hyper-acute stroke care provided in these units and the implementation of 24/7 thrombolysis.

South East Coast:
Currently there are no hospitals in the South East Coast that are designated as a major trauma centre. However, there are plans for the Royal Sussex County Hospital in Brighton to provide similar major trauma services in the coming years with the intention of working alongside designated trauma centres in London. Primary care trusts in Sussex are developing proposals for a trauma network, so that patients are treated locally.

It is expected that hospitals in the South East Coast admitting stroke patients will meet national standards for stroke unit care including hyper-acute care. In the future, hyper-acute care will be delivered from designated hyper-acute centres.
About this consultation

This booklet describes how we can develop world-class major trauma and stroke services for all Londoners.

We aim to save up to 500 lives each year, reduce disability, and help thousands of Londoners who suffer a major trauma or stroke recover from their condition and live full and active lives.

This consultation is about where new major trauma and stroke services could be delivered in the future. We are asking for your views on:

- The number and location of major trauma centres that will be developed to treat major trauma injuries and co-ordinate trauma networks in London.
- The number and location of highly specialised hyper-acute stroke units, local stroke units and transient ischaemic attack (TIA) services in London.

We are proposing a number of options for how these new, additional services could be organised, ensuring that all Londoners have access to the best specialist care, as quickly as possible. These options are described later in this document.

If after reading this booklet you want to find out more, you can come and talk to managers and clinicians running the consultation at a health fair or consultation meeting in your area. There are more technical and research papers available too, so please visit our website www.healthcareforlondon.nhs.uk, or contact us on: 0808 238 5481 if you want to request some of these papers or want more information on visiting the health fairs.

There is a questionnaire at the end of this booklet and on our website. Please feel free to answer any or all of the questions. We are also interested in any other comments you may have.

You can make your views known by:

- visiting our website www.healthcareforlondon.nhs.uk
- completing the questionnaire at the end of this booklet or writing to: Freepost RSAE-RCET-ATJY Healthcare for London Harrow HA1 2QG
- calling freephone: 0808 238 5481
- faxing: 0808 238 5480
- emailing: hfl@ipsos.com

Your comments will go direct to the independent assessors of the consultation, Ipsos MORI.

You can also request information in alternative formats including other languages, Braille, audio and easy read, by calling the freephone number above.

All comments must be received by 8 May 2009.
**Improving access for all Londoners**

Our proposals aim to reduce inequalities and improve access for everyone living in London. A series of assessments will compare the likely impact of the proposals on health equalities and inequalities. Early findings will be published in March 2009 so that you can consider the report before submitting your views (if you wish). The final report will be provided to PCTs to explain the implications of different options so that these can be considered when making decisions.

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**Criteria for making decisions on stroke and major trauma**

A Joint Committee of PCTs consisting of all London PCTs has been established to supervise this consultation and to take decisions at its conclusion. The joint committee agreed criteria which were used to ensure the best possible options were developed and included in the consultation. These criteria were:

- Quality – to ensure all providers are able to deliver services to the highest standards.
- Comprehensive coverage of the London population – to ensure all residents can access services in acceptable times.
- Strategic coherence or ‘best fit’ – to ensure opportunities are pursued to bring important acute services together where there is benefit in doing so. In the view of the National Clinical Advisory Team (NCAT), bringing together major trauma and hyper-acute stroke services has benefits and will enable the development of major acute hospitals as set out in *Consulting the Capital*.

These criteria will ensure we develop proposals and deliver services which:

- offer world-class quality;
- ensure equity for all Londoners;
- are sustainable and encourage strategic partnerships and collaboration.

We are interested in hearing your views on the criteria which will be used to make decisions on this consultation. See the questionnaire at the end of this document.
Major trauma

The case for change

Major trauma makes up only 0.1% of Accident and Emergency (A&E) workload, but these patients often have multiple and complex injuries. In London, there about 1,600 major trauma cases each year – about one patient per hospital each week. Most injuries occur in central London. Major trauma patients require very specialist treatment. Often teams of experts need to respond quickly to ensure patients have the best chance of survival and recovery.

In London and across the UK, the quality of care delivered to most trauma patients is poor. The National Confidential Enquiry into Patient Outcome and Death in 2007 found that over half of patients receive sub-standard care. The enquiry highlighted problems in the accuracy of diagnosis, clinical decision making and shortage of experienced staff around the clock.

International comparisons show London is lagging behind other major cities in its treatment of trauma patients. Death rates for severely injured patients who are alive when they reach a hospital are 40% higher in the UK than in some parts of the US where they have developed effective trauma systems. In Quebec, Canada, death rates fell by over 50% when the province introduced a trauma system2.

Most of London’s hospitals are not set up to provide highly specialised care for major trauma patients and services are often poorly co-ordinated3. But the best evidence shows that dedicated major trauma centres with expert teams of professionals are able to save lives. By treating greater numbers of patients these teams could improve their skills and provide a better service.

Major trauma care, close to the standard we believe is possible, is currently only provided at the Royal London Hospital in east London, which has reduced deaths of its most severely injured patients by 28% compared with the national average.

"Even if money was no object and it was possible to equip and staff specialist centres in every hospital, it would be better to transport patients to teams that regularly perform the procedures." Matt Thompson, Clinical Director of the major trauma project

Patients and clinicians want change

Development of proposals for new major trauma services was guided by:

- A clinical expert panel, with members representing the main specialities that deal with major trauma, from hospitals both in and outside London as well as other professionals such as the London Ambulance Service and Helicopter Emergency Medical Service.

- A commissioning and finance panel, with representatives from the NHS in London and east of England.

- A patient panel, representing patients, carers and organisations with an interest in major trauma care.

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3 National Confidential Enquiry into Patient Outcome and Death, 2007
“Timely intervention by the right people counts – not how quickly you can get inside the doors of your local A&E.” Public consultation event participant
Summary of the proposal – what it means for patients

Patients across London will benefit from these proposals. Major trauma centres will take on responsibility for improving the performance of all trauma centres in A&Es across the capital.

The majority of people who have a major trauma injury are taken to their local hospital where there can be a big delay in receiving care. Often patients have to wait to be assessed by a junior clinician before seeing a senior consultant. Two thirds of major trauma patients end up being transferred because their local hospital is unable to provide the expert care needed. Often patients wait around six hours to be transferred.

In future you will have a much better chance of surviving and recovering from a major trauma injury. You will have direct access to specialist teams and state-of-the-art equipment to ensure you receive immediate treatment, 24 hours a day, seven days a week.

Our plans will save lives, reduce long-term disability and improve standards of care. We will also be better able to plan for, and respond to, major incidents.

If you have a severe injury, you will be assessed by an ambulance staff at the scene of the incident. You will then be taken by ambulance direct to one of three or four major trauma centres. Here you will be cared for by an onsite team including experts in diagnostic tests, trauma injuries, cardiothoracic and neurosurgery.

You will receive specialist care much faster than now. Under our proposals, you will be no more than 45 minutes by ‘blue light’ ambulance to a major trauma centre where you will then have immediate access to specialist care. Our travel times are based on London Ambulance Service figures; see page 15 for more information.

If you have less severe injuries, you will be taken to the nearest trauma centre at a local A&E. Patients will benefit from the shared knowledge of clinicians in the network. If on arrival the injuries are assessed as being more severe than originally thought, the patient will be quickly transferred to the nearest major trauma centre.

“Specialist care will enable faster uptake of treatment and better standards of care for patients.” The London Health Forum

“Travelling to the appropriate hospital to receive the best possible care in the shortest amount of time is the most important consideration when dealing with major trauma patients.” Major trauma patient panel member

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<td>Major trauma care specifically for children is also being considered by Healthcare for London. There are only about 300 cases a year – less than one case in London a day. Many of the services used for child major trauma are the same, or similar, as those needed for adults, but there are some services that need different types of treatment.</td>
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<td>Healthcare for London is currently developing proposals for the provision of major trauma services for children. These proposals will be published when they become available.</td>
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4 Modernising Major Trauma Services in London. London Severe Injuries Working Group, 2001
Care for people with burns

It is likely that a specialist burns centre will be required in London. Healthcare for London is working with the National Burns Care Group and NHS providers to review how care is provided for people with burns in London, with a view to improving services.

Any decision on the location and delivery of a specialist burns services will take into account the provision of children’s major trauma services as well.

New model of major trauma care

We are proposing that three or four trauma networks be established in London, giving patients direct access to dedicated specialists and treatment.

Each network will have:

- A major trauma centre – providing immediate treatment to people with the most serious injuries 24 hours a day, seven days a week. These centres would have the equipment, facilities and teams of experts to ensure effective diagnosis and early treatment of seriously injured patients.

- First-class trauma centres based at A&E departments. These centres will treat people with less severe injuries and provide high-quality, ongoing treatment and rehabilitation for all patients. Patients in major trauma centres would be transferred to a more local hospital as soon as clinically possible for ongoing care.

The trauma network will ensure co-operation and collaboration between hospitals. It would also develop a high standard of rehabilitation care in community settings.
Getting to the right hospital

For major trauma, spending a little extra time getting to a hospital which provides the right team of specialists is more important than getting to the nearest hospital. Research proves that specialist treatment at a major trauma centre has a greater impact than journey time (i.e. the time spent in an ambulance) on medical outcomes\(^5\) and can increase survival rates by 28%.

Under our proposals, all Londoners will be within 45 minutes ‘blue light’ ambulance journey of a major trauma centre\(^6\). This timeframe is used by other trauma systems in parts of the UK and the US. In most cases, travel times will be much shorter as most major trauma incidents happen in central London as the map below shows.

\[\text{Map 1. Where major trauma incidents happen in London}\]

“We are confident that we can meet targets for delivering patients to Major Trauma Centres within 45 minutes. Furthermore, given that most major trauma occurs in the centre of London the average journey time will be much lower.” London Ambulance Service

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\(^5\) Resources for Optimal Care of the Injured Patient. American College of Surgeons, 1999

\(^6\) Journey times are based on London Ambulance Service (LAS) and Transport for London figures, and take into account journey times at different times of the day including rush hour. Emergency ambulance journeys are about one and a half times faster than if you were to travel by car.
Case study: The Royal London
At present there is one hospital in London providing services close to that of major trauma centre, The Royal London Hospital in Whitechapel. The Royal London has demonstrated a significant improvement in outcomes for trauma patients.

The hospital treats 450 major trauma patients a year and its results are impressive. In 2006 it recorded 28% fewer deaths over a five year period in major trauma and trauma patients compared with the national average\(^7\).

Will major trauma centres have a helicopter landing pad?
A helicopter pad is not a requirement for major trauma centres as road ambulance journeys are often more appropriate than air transport for London. Helicopters are restricted by where they can land to attend to a patient. Flight paths and times are also restricted in central London.

The Royal London Hospital already has a helicopter pad, and we are proposing that it will receive the majority of major trauma patients being delivered by helicopter.

\(^7\) UK Trauma Audit and Research Network 2006 statistics
How the options were developed

Clinicians from across London are behind the changes proposed. Working with charities such as Headway and the Spinal Injuries Association and members of the public they developed ideas on how services could be improved for every single Londoner. Healthcare for London invited all NHS hospitals in London to submit plans on how they could realise these ambitions of quality and equality.

How many trauma networks are right for London?

There are advantages and disadvantages of more or fewer major trauma centres. We believe three or four major trauma centres would provide the best care for Londoners for a number of reasons:

- Centres seeing more patients have better clinical outcomes as clinical teams develop and maintain their expertise. The clinical expert panel advised that a major trauma centre should see at least 400 major trauma patients a year to ensure the centre is fully able to develop its expertise in treating major trauma patients and hence deliver better outcomes. With about 1,600 major trauma patients per year in London, we believe that three or four major trauma centres would result in the best outcomes for patients. Five centres would be treating too few patients to achieve excellence.

- Major incident capacity – NHS London Department of Emergency Preparedness considers that two networks would be too few to be able to cope in an emergency.

- Capacity – it is difficult to predict the numbers of major trauma. Two centres would not have the capacity to cope with extra numbers of patients.

- Co-ordination of networks – major trauma centres will improve trauma care across London by leading and managing all A&E trauma centres. Networks of small numbers of hospitals will be easier to set up and manage than bigger ones and so two centres find it difficult to bring about the changes we require.

We believe two centres would not be able to cope with the number of major trauma patients and there would be insufficient capacity to deal with a major incident – especially if the incident was at one of the major trauma units. On the other hand, five or more centres would not have the high volume of patients needed to achieve better outcomes for patients.
An independent expert panel, made up of clinicians and health experts from outside of London judged the submissions for trauma networks that could deliver services to future standards.

This independent review showed there were five hospitals in London capable of providing major trauma care and leading a trauma network. Three hospitals could meet the standards by April 2010. These were:

1. The Royal London Hospital – Bart’s and the London NHS Trust
2. King’s College Hospital – King’s College Hospital NHS Foundation Trust
3. St George’s Hospital – St George’s Healthcare NHS Trust

A further two hospitals in London could meet the standards by April 2012. These were:

4. St Mary’s Hospital – Imperial College Healthcare NHS Trust
5. The Royal Free Hospital – The Royal Free Hampstead NHS Trust

Following this independent review, options for delivering new major trauma services were developed, based on the three criteria (quality, comprehensive coverage of London, and strategic coherence or ‘best fit’) described on page 10.

Three or four networks?

Three networks has the advantage of high numbers of patients being treated at each major trauma centre (and therefore potentially good clinical outcomes). However we need to balance this against whether three major trauma centres could cope with:

- the number of patients;
- leading the expected improvement in all of the networked trauma centres (in a three network model each major trauma centre would manage more trauma units than a four network model). We believe this is a particularly significant issue. Whilst the specialist care at a major trauma centre is of great importance, many thousands of patients will benefit if we drive up standards across all trauma services;
- a major incident.

Therefore our recommendation is for a four network trauma system which would provide each major trauma centre with enough patients to become truly world-class whilst also being able to cope with unexpectedly high numbers of patients (particularly in a major incident) and managing networked trauma centres across London.

The National Clinical Advisory Team has reviewed our proposals for major trauma. The team found that the plans were likely to result in high-quality, safe care and better outcomes for people. The team considered four centres would be most likely to provide better coverage for north-west London than three centres.
The proposals: where major trauma care could be provided

We believe developing new world-class trauma networks could save 100 lives each year, reduce disability and improve standards of care given to trauma patients treated across London.

Major trauma centres will provide better access to life-saving treatment and be responsible for managing the operation of networks including maintaining standards of care and ensuring the consistent and successful delivery of services.

The quality of trauma care provided to people with less severe injuries will improve throughout London. Every trauma centre will be part of a trauma network and will work together and learn from each other.

There are three options for establishing trauma networks in London:

Option 1. Three trauma networks

Major trauma centres at The Royal London Hospital, King’s College Hospital and St George’s Hospital.

Option 2. Four trauma networks

Major trauma centres at The Royal London Hospital, King’s College Hospital, St George’s Hospital and The Royal Free Hospital.

Option 3. Four trauma networks

Major trauma centres at The Royal London Hospital, King’s College Hospital, St George’s Hospital and St Mary’s Hospital.

Each option will provide coverage for the whole of London and major trauma centres and networked trauma centres in London are shown on the following maps. However other trauma centres from outside of London are involved in the proposed networks but are not included in these maps.

Comparison of options

Option 1. Three trauma networks

[Map showing the location of major trauma centres in London]
Three trauma networks with major trauma centres at The Royal London Hospital, King’s College Hospital and St George’s Hospital

Three networks:
- would provide each centre with a higher number of patients than four centres
- would be quicker to set up than four centres (all of London would be covered by April 2010)
- but could be over-stretched, particularly if there were a major incident.
- and would have difficulty in managing and leading improvements in a large network of trauma centres.

Option 2. Four trauma networks, with an option of a major trauma centre at The Royal Free Hospital

Four trauma networks with major trauma centres at The Royal London Hospital, King’s College Hospital, St George’s Hospital and The Royal Free Hospital

Four networks:
- would have have less patients at each centre and part of London would not have a fully functional service until April 2012
- but would be better able to deal with high numbers of patients particularly in the case of a major incident.
- and would be better able to manage and co-ordinate smaller networks of trauma centres
Option 3. Four trauma networks, with an option of a major trauma centre at St Mary’s Hospital

• The same advantages and disadvantages of four trauma networks outlined in option 2 apply to option 3.

• The difference between option two and option three is whether The Royal Free Hospital or St Mary’s Hospital provides major trauma care and leads a trauma network.

JCPCT to agree if it supports a preferred option. Text to be inserted depending on outcome of discussions on 27 Jan.

Question 1. Which option do you think would provide the best trauma care for Londoners?

1. Three trauma networks, with major trauma centres at The Royal London Hospital, King’s College Hospital and St George’s Hospital OR
2. Four trauma networks, with major trauma centres at The Royal London Hospital, King’s College Hospital, St George’s Hospital and The Royal Free Hospital OR
3. Four trauma networks, with major trauma centres at The Royal London Hospital, King’s College Hospital, St George’s Hospital and St Mary’s Hospital.

Question 2. Why do you think this is the best option? Or use this space for any other comments.
Turning the vision into reality

Implementing new trauma networks

Following the outcome of this consultation, hospitals where major trauma services will be commissioned will be supported to develop sustainable, high-quality services for London.

A London Trauma Office will be established to oversee and provide guidance to trauma networks in managing the introduction of a London trauma system by April 2010.

A major trauma centre at St Mary's Hospital or The Royal Free Hospital will require more time to develop to meet clinical standards, but would be setup by April 2012. A transition plan for handling major trauma cases in north west London will be developed. Patients could be stabilised at a local hospital (as currently) before being transferred to one of the other three major trauma centres.

New services will be monitored to make sure they are delivering improved care for all Londoners. We will check clinical quality, patient experience, workforce development and cost efficiency. Currently only four London hospitals contribute to the trauma audit research network (TARN), and only one has complete data. However, in future all centres in the London trauma system will be required to submit full data every year.

Finance

More investment will be needed to provide higher quality services for people suffering major trauma injuries.

An extra £9 - £12 million per year is needed to deliver the proposed improvements in major trauma care. PCTs will be working with NHS trusts during 2009/10 to agree contract arrangements.

There are significant economic and social benefits of reducing the number of disabilities resulting from trauma injuries. A study on the effectiveness of trauma systems in December 2007 found that for each trauma patient returned to work there is a 5-15 times return on the investment\(^8\). Therefore, economic benefits exceed the direct costs of medical care.

Costs per life saved in major trauma cases are very low compared with other treatments.

Workforce and training

Our proposals will provide increased opportunities for staff to gain skills and experience. There will be changes in staff roles so we will need to fully assess and plan any workforce changes to make sure any impact is anticipated.

The workload of most A&E departments will not change significantly. There will be little impact on A&E staff, as there will be a designated team attending to major trauma cases while other trauma cases will be managed through the same procedures as they are now.


*9 formatting error, to be corrected*
The London Trauma Office will be responsible for establishing a training and development programme involving rotation of staff and training positions, as well as formal training developments.

Healthcare for London is working with the London Ambulance Service and the Helicopter Emergency Medical Service to improve the assessment arrangements for trauma patients. This will ensure that the most appropriately skilled team are despatched to the call. Upon arrival at the scene, they will have adequate training to decide upon and deliver the correct care for trauma patients, and will then convey to the best hospital in the network for the patient.
Stroke

The case for change

Stroke is the second highest cause of death and the most common cause of adult disability in London. More than 11,000 people having a stroke are admitted to London hospitals each year – around one person every hour – and around one in six people die.

The UK has a higher proportion of deaths due to stroke compared with Australia, Germany, Sweden and the US, and almost double the number of deaths that occur in France. Clinical evidence shows that patients are 25% more likely to survive or recover from a stroke if treated in a specialist centre.

In London there are big differences in the quality of stroke care and rates of death in different hospitals vary considerably. There are also big differences in the number of strokes that occur in different areas, as shown in map 2 below. Age is a significant factor in stroke, so more strokes occur in outer London where the populations are older. Currently these areas have the most limited access to specialist stroke services. The two next most important factors are ethnicity (there is a 60% greater incidence of stroke within the black African and black Caribbean populations) and social deprivation.

Map 2: Prevalence of stroke in London
London has been slower to make improvements in stroke services than the rest of the country – and in some cases, quality of care has deteriorated in recent years. Dedicated, high-quality, specialist stroke units reduce death and levels of disability. Yet, currently, only about 50% of stroke patients are treated on a dedicated stroke unit. The first 72 hours following a stroke are especially important.

Many hospitals in London are failing to provide the specialist care required by stroke patients. They may not have the specialist staff or equipment to be able to provide care of the highest quality 24 hours a day, seven days a week. For instance, three hospitals in London are not able to give all stroke patients a CT scan within 24 hours to determine the cause of the stroke.

Stroke patients need fast access to high-quality scanning facilities. This is because for some patients having an ischaemic stroke (see page 6) the use of clot-busting drugs (thrombolysis) can reverse the damage caused by stroke. The scan shows if the patient is suitable for thrombolysis – some types of strokes thrombolysis can worsen the condition so it is vital identify the type of stroke with which a patient presents.

Patients who receive thrombolysis within three hours of a stroke have a much better chance of recovering. Currently less than 10% of suitable patients are offered thrombolysis.

For patients who have a transient ischaemic attack (often called a ‘mini stroke’) and who are assessed as high risk, evidence shows that investigating their symptoms within 24 hours and providing specialist treatment can reduce the likelihood of them going on to have a full stroke by 80%. Over a third of hospitals in London are not meeting this target.

Specialist stroke services will transform the care provided in London. Londoners will have rapid access to the best equipment and will be treated on dedicated stroke units manned by specialist teams.

Diagram 2: Comparison of Sentinel Audit results (2006 and 2008), London

The Sentinel Audit measures performance of stroke care across London providers.

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10 However the actual number of people from black and minority ethnic communities having a stroke are not as high as would be expected as there are fewer older black and minority ethnic people in London.
11 2008 Sentinel Audit
12 Suitability for thrombolysis may also depend on onset time, medical conditions and other medication such as anti-coagulation.
13 The National Stroke Strategy references the NICE guidance - TA122 Alteplase for the treatment of acute ischaemic stroke.
14 National Stroke Strategy (p.23)
Patients and clinicians want change

Plans for improving stroke services were guided by three panels:

- Clinical expert panel, with representatives of healthcare experts such as doctors, nurses and allied health professionals.
- Commissioning and finance panel, with representatives from PCTs and the stroke and cardiac network leads.
- Patient panel, with patient and carer representatives and from organisations with an interest in stroke care.

A series of events were held in 2008 involving stroke consultants and clinicians, patients, carers, local NHS organisations and voluntary organisations.

“The Stroke Association accepts that specialist care requires the centralisation of more specialised services in fewer hospitals. This requires planned development with proper consideration being given to the infrastructure and workforce required to deliver such a service.” The Stroke Association

"I was admitted at night – the scanning unit was closed. She [friend who called ambulance] was told I wouldn’t have a scan until the next day." Stroke patient

“She was transferred to a general ward because the beds were full. We thought that she would be there for a few days of until a bed became available in the stroke ward. It was only after an entire week that she was transferred.” Carer of a stroke patient

International case study: Ontario

In 2000, stroke services in Ontario, Canada, were redesigned to provide specialised centres, ensuring patients were quickly assessed and treated with clot-busting drugs if appropriate. Ambulance staff take patients directly to the specialist centre rather than the nearest hospital.

Hundreds of Ontarians are now recovering from stroke that would have otherwise needed long-term care. The system-wide change achieved real results:

- people dying from stroke in hospital fell by 7.6%;
- appropriate patients receiving thrombolysis within two and a half hours increased by nearly 30%;
- stroke patients left hospital around two days earlier;
- fewer stroke and mini-stroke patients were admitted to hospital in the first place.
Summary of the proposal – what it means for patients

Currently if you have a stroke you will be taken to the nearest A&E, but this hospital is unlikely to be able to assess or treat you within 30 minutes. In many cases you may have to wait up to 24 hours or more before receiving a scan to determine the type of treatment you need. By this time it is too late for clot-busting drugs to be effective. Strokes cause brain cells to die; for each hour you wait you lose brain cells equivalent to 3.6 years of life. Only around half of stroke patients are treated on a dedicated stroke ward.

In the future, you will have a much better chance of surviving and recovering from a stroke. If you have a stroke, you will have rapid access to dedicated, expert teams and the best technology 24 hours a day, ensuring you receive immediate treatment.

You will receive this care much faster than at present. Our plans aim to treat patients within three hours of having a stroke, the ‘gold standard’ for world-class stroke care.

If you have a stroke you will be taken by ambulance to the nearest hyper-acute stroke unit at one of eight hospitals in London. This will be located no more than 30 minutes away.

On arrival, you will be assessed by a specialist, have access to a brain scan and receive clot-busting drugs (if appropriate), all within 30 minutes. You will stay in the hyper-acute stroke unit for the first 72 hours, or until stable. You will then be transferred to a dedicated stroke unit in the same hospital or closer to your home where you will receive continued specialist treatment and intensive rehabilitation. Care in a dedicated stroke unit will significantly improve your chances of recovering from a stroke. You will receive further appropriate care in the community.

People having a mini-stroke (TIA) will also receive the highest-quality care. If you have a mini-stroke you will be seen by an expert who will do further investigations. This will reduce the chance of you going on to have a full stroke.

Specialist centres will improve the recovery rates and reduce long-term disability for the majority of people who suffer a stroke.

What expert treatment can be given to a patient who is not suitable for thrombolysis or who is admitted after three hours following a stroke?

Specialist stroke units provide the most intensive monitoring, investigation and care for all stroke patients. Patients who are not suitable for thrombolysis or who are admitted after the three hour window (see page 29) will still benefit from expert treatment.

On arrival to a hyper-acute stroke unit, a patient will be stabilised and a range of investigations carried out to determine the cause of the stroke and crucially prevent another from occurring. Expert monitoring by specialist stroke nurses will ensure any complications, such as chest infections and problems swallowing, are detected and given urgent medical attention. Therapy staff are also able to minimise the long-term impact of a stroke and begin intensive rehabilitation as early as possible.
“When I recently collapsed at work, my colleagues quickly called 999. Within minutes the London Ambulance Service crew had arrived and did a FAST test, which showed I had all three signs of a stroke.

I was rushed to the emergency department and when I arrived my face was drooping on the right and I couldn’t use my arm or leg and I could barely speak. It was very scary, but the staff were really kind and supported me the whole way.

They took me straight to the onsite brain specialists for an emergency CT scan. This confirmed I’d had a stroke caused by a blood clot so I was given ‘thrombolysis’, a treatment to break it up. I was then taken to the acute stroke unit so they could monitor me.”

A stroke patient describing her experience.

**New model of stroke care**

Three new stroke services are proposed:

- Hyper-acute stroke units will provide the immediate response to a stroke, for the first 72 hours – or until a patient is stabilised. The units will be open 24 hours a day, seven days a week (24/7). Anyone having a stroke in London will be taken to one of eight units to have a brain scan and receive clot-busting drugs (if appropriate), within 30 minutes of arriving at the hospital. All Londoners will live within 30 minutes ambulance drive-time of world-class services.

- Twenty-one stroke units will provide ongoing care once a patient is stabilised, including multi-therapy rehabilitation. This care may be provided in the same hospital as the hyper-acute unit, or in a hospital nearer to a patient’s home.

- Transient ischaemic attack (TIA), mini-stroke services will provide rapid assessment and access to a specialist within 24 hours (for high-risk patients) or within seven days (for low-risk patients).

The proposed location and coverage of acute stroke services is outlined on page 30.
Access to specialist stroke care in 30 minutes

For good quality stroke care, clinical excellence is essential, but time is of the essence too. It is important that people having a stroke access specialist services quickly. If you think someone is having a stroke, you must call an ambulance urgently (see the FAST test on page x).

We believe that all Londoners should be assessed, diagnosed and treated within three hours of having a stroke. This ‘gold standard’ is supported by clinicians and patient organisations like The Stroke Association.

The three hour window allows for:
- discovery that a person has had a stroke;
- an ambulance to arrive on the scene and assess a patient using the FAST test;
- transfer of the patient to a specialist centre within 30 minutes;
- a hospital to do a brain scan (CT) and give the patient clot busting drugs (thrombolysis) if appropriate.

Diagram 4: Three hour window

Plans for new stroke services have been developed with the London Ambulance Service to ensure that all Londoners can be taken by ambulance to a hyper-acute stroke unit within 30 minutes of leaving the scene.

This involved analysing ambulance journeys over the past three years – four million records – and determining the exact times for different stages of the journey, such as the call to the scene, scene to the hospital. We compared journey times at different times of day and days of the week, and types of ambulance journeys. The effect of rush hour traffic was also considered using data from the LAS and Transport for London.

Journey times for heart attack patients following the introduction of nine specialist heart attack centres in London (see case study on page xx) have been reviewed and compare well to our proposals for stroke services.
In Consulting the Capital, three quarters of respondents agreed that ambulance staff should take seriously ill and injured patients directly to a specialist centre, even if there is another hospital nearby, provided that ambulance staff had adequate training.

Case study: specialist care for heart attacks

This consultation proposes treatment for stroke patients similar to the care currently provided for people having a heart attack.

If an ambulance paramedic suspects that someone is having a heart attack, they take the patient directly to one of nine specialist centres in London, instead of the nearest A&E. Although time is less critical for people having heart attacks, nearly all patients reach hospital within 30 minutes.

By going straight to a specialist centre, heart attack patients benefit from angioplasty, a procedure which involves inserting a balloon into a blocked artery and inflating it to open it up.

The specialist centres are having a dramatic impact on survival rates.

Under our proposals for new stroke services, units are more spread out to cover the whole London so we believe travel times will be even faster for stroke patients.
How the options were developed

Clinicians from right across London have worked with charities such as The Stroke Association and Connect and hundreds of members of the public to develop ideas on how services could be improved for every single Londoner – patients, carers or relatives.

NHS hospitals in London were invited to submit plans to show how they could provide services that met the high ambitions that clinicians had set in one, two or all three types of acute stroke care setting:

- hyper-acute stroke units;
- stroke units;
- transient ischaemic attack (TIA) services.

Submissions were reviewed by an independent expert panel, made up of clinicians and health experts. This review found that while all hospitals could achieve the very high standards of service that had been set, some would need particularly strong support to make this happen.

Evaluation scores for sites are available in the pre-consultation business case on Healthcare for London’s website, www.healthcareforlondon.nhs.uk or contact us at the address shown at the front of this document.

Following this independent review, options for delivering proposed new stroke services were developed, based on the three criteria (quality, comprehensive coverage of London, and strategic coherence or ‘best fit’) described on page 10.

There is a greater choice of hospitals providing higher quality of care in central London than in outer London where prevalence of stroke is higher. We need to ensure there is good coverage of high quality stroke services for the whole of London to ensure that everyone can get to a hyper-acute stroke unit within 30 minutes.

How many hyper-acute stroke units and stroke units are right for London?

A number of factors need to be taken into account when working out the best number and location of hyper-acute stroke units and stroke units:

1. Capacity of hospitals - to provide specialist care, London needs about 130 hyper-acute unit beds and 550 stroke unit beds. This is based on analysis of the number of patients that are expected to attend London hospitals with a suspected stroke. So the units need to provide this number of beds in the right locations.
2. Strokes tend to occur in older people, more of whom live in the outskirts of London. Quick access to a scan and treatment is essential. So enough units need to be provided in the right places to ensure all Londoners can get to a hospital within 30 minutes.
3. Teams providing complex care to lots of people have the best outcomes for patients. Therefore, fewer larger units are likely to provide better care for stroke patients.

After balancing these factors, the Joint Committee of PCTs agreed that eight hyper-acute units supported by a network of local stroke units are the best numbers for London.
We believe that fewer than eight hyper-acute units would not be able to provide the coverage needed in terms of capacity or travel times. However, more than eight units would reduce the volume of patients seen at each unit, and so reduce the benefits of providing specialised care.

Following *Consulting the Capital*, the Joint Committee of PCTs recommended that around seven hospitals should provide specialist care 24 hours a day, with some other hospitals providing urgent care during the day. Following discussions with a wide range of professionals, patients and carers it was agreed that providing urgent care in some hospitals during the day would not result in sufficient quality of care. There were also concerns about staffing and complications for ambulances in directing patients to the right units. More detail can be found in the *Stroke Strategy for London*. 
The proposals: where stroke care could be provided

The provision of healthcare in London is changing. This consultation is about improving services for all Londoners. Partly this can be achieved by hospitals becoming specialist centres of excellence but equally as important is that hospitals build on existing partnerships and develop new ones. It is essential that hospitals utilise existing stroke networks, supporting each other, sharing knowledge and information and work together to implement plans and ensure new services are of excellent quality.

Hyper-acute units

Hyper-acute stroke units will provide the immediate response to a stroke, for the first 72 hours or until a patient is stabilised.

We recommend the creation of eight new hyper-acute stroke units at:
1. Charing Cross Hospital*
2. King’s College Hospital
3. Northwick Park Hospital
4. Queens Hospital
5. St George’s Hospital
6. The Princess Royal University Hospital
7. The Royal London Hospital
8. University College Hospital**

* Should St Mary’s Hospital be designated as a major trauma centre, a plan would be developed to co-locate stroke services at St Mary’s.
** Should The Royal Free Hospital be selected as a major trauma centre, the JCPCT would need to take this into account when deciding on the location of a hyper-acute stroke unit.

Map 3. Preferred option for hyper-acute stroke units
We believe the proposed sites will provide high-quality care for the whole of London, ensuring everyone can access specialist care within 30 minutes by ambulance.

All of the hospitals were independently assessed on their ability to provide future hyper-acute stroke services and will need to meet challenging new standards to deliver hyper-acute stroke services. Hospitals would need to be supported in their planning and delivery by local health commissioners and stroke networks. Based on the conclusions of the evaluation process described on page 31, there will have to be very strong and intensive support in place to drive the development of hyper-acute services on certain sites. These include The Princess Royal University Hospital, The Royal London Hospital and Queens Hospital as they were identified to have very significant development needs. Services at these locations are needed to ensure that all Londoners can access hyper-acute services within 30 minutes.

There are more sites capable of delivering specialist stroke services in central London than we need to ensure high quality hyper-acute stroke care is available to all Londoners within 30 minutes. We believe that hyper-acute stroke care should be delivered in no more than eight sites. This would increase the number of patients being treated at each site, and ensure that expert teams were available 24 hours a day in all hyper-acute stroke units - improving survival and reducing disability. In taking difficult decisions to create a preferred option we recognise the quality of services at a number of other hospitals. We would want these hospitals to play a significant and extended role in transitional arrangements. This will involve partnerships (formal and informal) with those hospitals with hyper-acute stroke units and the provision of support for service development across London.

Alternatives to our recommended option

We have described our recommended option, but a number of alternative hospitals showed they could meet future standards for hyper-acute stroke units: Barnet Hospital, Chelsea and Westminster Hospital, The Royal Free Hospital, St Thomas’ Hospital and Mayday Hospital.

The advantages and disadvantages of each alternative are described below. The Joint Committee of PCTs has ‘paired’ each of the alternatives above with the hospitals in the recommended list which could serve similar populations in London. We welcome views on these options. Please note, we are proposing that all of these hospitals provide dedicated local stroke units and TIA services.

Royal London Hospital or St Thomas’ Hospital
St Thomas’ showed it could meet future standards and its location could provide services to people in north east London. The Royal London would need more support in meeting future standards. The Royal London gives better journey times and is proposed as a major trauma centre with neurosurgery service. The Royal London is the preferred site for the hyper-acute stroke unit.

Charing Cross Hospital or Chelsea and Westminster Hospital
Both hospitals showed they could equally meet future standards. However, Charing Cross hospital is the preferred site for the hyper-acute stroke unit as it gives slightly better travel times and would be co-located with neurosciences facilities. Should St Mary’s Hospital be designated as a major trauma centre, plans would be developed to co-locate stroke services.

King’s College Hospital or St Thomas’ Hospital
Both hospitals currently provide first class stroke care and showed they could equally meet future standards. King’s College is the preferred site for the hyper-acute stroke unit as it
provides better access for the population of south east London. In addition King’s College offers greater alignment with the strategic criteria. We strongly expect that King’s and St Thomas’ will work closely together in shaping and delivering stroke services for the population they serve. This is particularly the case in light of their developing partnership working as an emerging Academic Health Science Centre.

Northwick Park Hospital or Barnet Hospital
Both hospitals showed they could equally meet future standards. Northwick Park provides gives better travel times and its location better reflects existing patient flows. Northwick Park is the preferred site for the hyper-acute stroke unit.

St George’s Hospital or Mayday Hospital
St George’s Hospital scored higher on ability to meet future standards than Mayday Hospital. St George’s is also proposed to be the site for a major trauma centre with neurosciences facilities and is therefore our preferred site for the hyper-acute stroke unit.

University College Hospital or The Royal Free Hospital
University College Hospital scored higher on ability to meet future standards than The Royal Free Hospital. While The Royal Free would give slightly better travel times, University College Hospital is our preferred site for the hyper-acute stroke unit. We strongly expect that University College Hospital and The Royal Free will work closely together in support of the hyper-acute stroke unit, reflecting their proposed partnership agreement as an Academic Health Science Centre. Should The Royal Free Hospital be selected as a major trauma centre, the JCPCT would need to take this into account in determining its decision on the location of a hyper-acute stroke centre.

In reviewing the options for the population of north London, we also considered Barnet Hospital. Both University College Hospital and The Royal Free scored higher on ability to meet future standards than Barnet Hospital; though Barnet has a slight advantage on travel times it is not our preferred site.

Question 3. Do you agree with our proposal on how we provide stroke care in the future?
Yes  No

Question 4. If not, what would you suggest and why?

Question 5. For good urgent care of stroke patients it is important to reach excellent quality care, fast. Do you agree that eight hyper-acute stroke units would provide the best urgent care for stroke patients in London?
Yes  No (If no, go to question 9)

Question 6. Do you agree our preferred option of hyper-acute stroke units at Queens Hospital, The Princess Royal University Hospital, The Royal London Hospital, Charing Cross Hospital, King’s College Hospital, Northwick Park Hospital, St George’s Hospital, University College Hospital will provide high-quality specialist care for residents of London?
Yes  No

Question 7. If not, please explain why you disagree.

Question 8. We have identified alternative sites which you may like to consider:
The Royal London Hospital OR St Thomas’ Hospital
If you don’t like our preferred sites, please tell us your alternative(s) from the list above and explain the reason(s) behind your choice.

**Question 9.** If you don’t like any of these proposals, what would you suggest and why?

**Stroke units**

Stroke units will provide specialist treatment and rehabilitation for stroke patients. All patients will be transferred from a hyper-acute stroke unit to one of these dedicated, local stroke units. This may be in the same hospital or a unit closer to home.

Stroke units are where patients will spend most of their time in hospital. So far more beds are needed in London (around 550) than for hyper-acute units. However the same principle applies for stroke units as for hyper-acute units – specialist teams treating high volumes of patients are better able to provide a first class service.

We recommend developing the following new stroke units at:
- Barnet Hospital
- Charing Cross Hospital
- Chelsea and Westminster Hospital
- King’s College Hospital
- Kingston Hospital
- Mayday Hospital
- National Hospital for Neurology & Neurosurgery (part of University College Hospital)
- North Middlesex Hospital
- Northwick Park Hospital
- Queen Elizabeth Hospital
- Queens Hospital
- St George’s Hospital
- St Helier Hospital
- St Mary’s Hospital
- St Thomas’ Hospital
- The Hillingdon Hospital
- The Princess Royal University Hospital
- The Royal Free Hospital
- The Royal London Hospital
- University Hospital Lewisham
- West Middlesex Hospital

All of the hospitals were independently assessed on their ability to provide future services for stroke patients and all will need to meet challenging new standards.

Some hospitals were identified through the independent review process described on page 31 to require strong support to meet these new standards. St Helier Hospital, Queen Elizabeth Hospital, Queens Hospital, The Royal London and The Princess Royal University Hospital were identified to have significant development needs and would need more
support to develop their services. But we believe that stroke units at these sites are required to meet demand for stroke beds in south west and south east London and provide local services.

Local NHS organisations in north east London are leading a general review of acute services which will be guided by the Healthcare for London vision. Whilst there is clarity that (under the preferred option) hyper-acute stroke units, stroke units and TIA services will be provided at The Royal London and Queens Hospital (Romford), the proposed locations of stroke and TIA services at north east London hospitals will not be clear until the review is complete. Stroke services at Whipps Cross University Hospital, Homerton University Hospital, Newham General Hospital and King George Hospital will continue to be provided whilst the review is undertaken. All these hospitals are potential providers of stroke unit and TIA services in the future. After the review’s completion in April, local NHS organisations will make specific proposals for stroke services of the highest quality which will be submitted to the Joint Committee of PCTs for consideration and, if appropriate, approval in July.

Local NHS organisations have considered the local needs of populations and propose the following hospitals – currently providing stroke services – do not provide services in the future:

- Ealing Hospital*
- Whittington Hospital*
- Queen Mary’s Hospital*
- Central Middlesex Hospital**
- Chase Farm Hospital**

* these sites would need significant support to meet future standards, and extra capacity is not required in this area
** did not submit a bid to provide stroke services
Map 4. Recommended configuration for stroke units

Question 10. Do you think the proposed configuration of stroke units (shown above) will provide the best care possible for Londoners?
Yes
No

Question 11. If you disagree with our recommended configuration of stroke services, please tell us your preferred option(s) and why.

Transient ischaemic attack (TIA) services

Transient ischaemic attack (TIA) services will provide rapid assessment and access to a specialist within 24 hours (for high-risk patients) or within seven days (for low-risk patients) for patients having a mini-stroke.

TIA services will be provided at hospitals with hyper-acute stroke units or stroke units.

We recommend developing the following TIA services:
- Barnet Hospital
- Charing Cross Hospital
- Chelsea and Westminster Hospital
- King's College Hospital
- Kingston Hospital
- Mayday Hospital
- North Middlesex Hospital
- Northwick Park Hospital
- Queen Elizabeth Hospital
- Queens Hospital
- St George's Hospital
- St Helier Hospital
- St Mary’s Hospital
- St Thomas' Hospital
- The Hillingdon Hospital
- The Princess Royal University Hospital
- The Royal Free Hospital
- The Royal London Hospital
- University College Hospital
- University Hospital Lewisham
- West Middlesex Hospital

All of the hospitals were independently assessed on their ability to provide future services for TIA patients and will need to meet challenging new standards.

Some hospitals would need more support to develop TIA services. In particular, Queens Hospital, The Princess Royal Hospital and The Royal London Hospital, Queen Elizabeth Hospital, St Helier Hospital and West Middlesex Hospital.

As described in the information above, stroke units in north east London are part of a wider review of acute services in the area. The proposed locations of stroke units and TIA services
in north east London (except for those located with hyper-acute stroke units) will be determined through the wider review.

Map 5. Recommended configuration of TIA services

Question 12. Do you think the proposed configuration of TIA services (shown above) provides the best possible care for Londoners?
Yes
No

Question 13. If you disagree with our recommended configuration of TIA services, please tell us your preferred option(s) and why.
Turning the vision into reality

Implementing new acute stroke services

Following the outcome of this consultation, hospitals providing specialist stroke services will be supported to develop sustainable, high-quality services for London.

Specialist stroke units will save hundreds of lives, will reduce disability and improve people’s chances of leading full and independent lives. Any delivery of new services needs to start as soon as possible.

Following decisions on this consultation, we will start to develop stroke services right away. Working with stroke networks, we will begin recruiting and training staff, updating facilities and developing links between hospitals providing stroke services.

As hospitals start to deliver new services from April 2010, they will continue to improve the quality of services over the first 12 months, at which time we expect they will deliver the highest standards of care.

PCTs will develop improvement plans and will measure new services to ensure they are delivering improved care for Londoners using performance standards developed with stroke clinicians, patients and carers. We agree with the National Clinical Advisory Team’s recommendation that a stroke clinical support team be established to assist hospitals needing more support to deliver high-quality services.

However, as shown in the previous chapter, not all hospitals in London will in the future provide acute stroke services. We will need to make sure that systems, capacity and quality of care services for all Londoners are all in place and working well before phasing out these high-quality stroke facilities. We recognise this will be challenging and we will need to manage transition processes and capitalise on areas of expertise including some at hospitals not designated as hyper-acute stroke units.

We anticipate that some hospitals (irrespective of the designation process) will play a key role in transition. Acknowledged centres of national excellence, could offer centrally located transitional capacity and provide support in the development of first class services across London.

Workforce

More and better trained doctors, nurses and therapists will be needed to deliver new stroke services. We will invest in nearly 600 more nurses, 200 more therapists and 16 more stroke consultants as well as more junior doctors. A detailed review of the stroke workforce is underway and the expected workforce requirements are being modelled, including the level of investment needed.

We believe there should be an approved training and development programme for stroke professionals to ensure we have a highly-skilled workforce.

NHS London’s strategy Workforce for London addresses key issues facing staff moving from hospitals to the community, employment flexibility and the continuing development of a workforce which reflects the diversity of London. The involvement of staff in delivering service changes is a key part of the strategy.
London Ambulance Service (LAS) staff will be asked to take a greater level of responsibility in decision-making and transferring patients.

**Finance**

An extra £23 million investment per year (on top of the £65 million already spent) is needed to deliver the proposed improvements in acute stroke care. All PCTs in London will fund improvements in stroke services; however it may also have an impact on non-London PCTs as 10% of stroke activity relates to patients who are resident outside of London.

Some PCTs may also need to invest more in rehabilitation. Improved acute care will mean that more people survive from stroke and require rehabilitation. However, the severity of disability and dependency is actually likely to reduce.

The *National Stroke Strategy* concluded that investment in prevention, acute care and rehabilitation would save social services in England £95 million per year.

**Partnership and collaboration**

The development of world-class major trauma care and stroke services offers a range of opportunities to build on existing partnerships and to develop new collaborations. We are:

- Placing an emphasis on networks which will ensure smooth patient pathways between organisations and consistent standards.
- Expecting Health and Science Centres to capitalise on the opportunity to consolidate acute services on specified site(s). We expect, over time, these centres to work with commissioners to ensure streamlined and efficient arrangements for the treatment of acutely ill patients requiring emergency specialist healthcare.
- Expecting collaboration between the centres which are close to one another as our proposals are implemented. We must have smooth transition to the new service arrangements.
- Requiring those organisations that have particularly complex development needs to be supported by those with stronger services. In some cases this might require direct involvement in service provision.
How to give your comments

If after reading this booklet you want to find out more, you can come and talk to managers and clinicians running the consultation at a health fair or consultation meeting in your area. There are more technical and research papers available too, so please visit our website www.healthcareforlondon.nhs.uk, or contact us on: 0808 238 5481 if you want to request some of these papers or want more information on visiting the health fairs. Or you can ask a question on the phone or by emailing us on: hfl@london.nhs.uk

If you think you have all the information you need to comment, there is a questionnaire at the end of this booklet or on our website. Please feel free to answer any or all of the questions. We are also interested in any other comments you may have.

You can make your views known:

- Complete the questionnaire on our website www.healthcareforlondon.nhs.uk
- Use the questionnaire on the following pages or write a letter to:
  Freepost RSAE-RCET-ATJY
  Healthcare for London
  Harrow
  HA1 2QG
- Freephone: 0808 238 5481
- Fax: 0808 238 5480
- Email: hfl@ipsos.com

Your comments will go direct to our independent assessors Ipsos MORI.

You can also request information in alternative formats including other languages, Braille, audio and easy read, by calling the freephone number above.

All comments must be received by 8 May 2009.

The partner local NHS organisations would like to thank all the staff and stakeholders who have generously assisted in the preparation of this document, including:

The members of the Joint Committee of PCTs

NHS Barking & Dagenham  Paul Sinden  Director of Commissioning
Barnet Primary Care Trust  Philippa Curran  PEC Chair
Bexley Care Trust  Steve Peacock  Director of Commissioning
NHS Brent  Marcia Saunders  Chair
NHS Bromley  David Fletcher  Non-Executive Director
NHS Camden  John Carrier  Chair
City & Hackney Primary Care Trust  Haren Patel  PEC Chair
Croydon Primary Care Trust  David Fitze  Non-Executive Director
Ealing Primary Care Trust  Philip Portwood  Non-Executive Director
Enfield Primary Care Trust  Kristy Leach  Corporate Governance
NHS Greenwich  Michael Chuter  Chair
Hammersmith & Fulham Primary Care Trust
Haringey Teaching Primary Care Trust
Harrow Primary Care Trust
NHS Havering
NHS Hounslow
NHS Islington
NHS Kensington & Chelsea Primary Care Trust
Kingston Primary Care Trust
Lambeth Primary Care Trust
Lewisham Primary Care Trust
Newham Primary Care Trust
NHS Redbridge
Richmond & Twickenham Primary Care Trust
NHS Southwark
NHS South West Essex
Sutton & Merton Primary Care Trust
Tower Hamlets Primary Care Trust
NHS Waltham Forest
Wandsworth Primary Care Trust
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Ken Aswani
Ann Radmore
Sheila D’Souza
Medical Director
Chair
Chief Executive
Director of Healthcare Procurement and Performance
Chair
Director of Quality & Healthcare Transformation
Chair
Clinical Executive Committee Chair
Chair
Vice-Chair
Director of Finance
PEC member
Acting Director of Public Health
Chair

Complaints

If you have a complaint about this document or the consultation process, you can contact Complaints, Healthcare for London, Southside, London SW1E 6QT.
Questionnaire

Personal details

Please tell us your name:
Please write in below

Are you:
Please tick one box only
Providing your own response
Submitting your response on behalf of an organisation

How old are you?
Please tick one box only
Under 25
25-24
35-44
45-54
55-64
65 or over
Prefer not to say

Are you?
Please tick one box only
Male
Female
Prefer not to say

Which ethnic group do you consider yourself to belong to?
Please tick one box only
White
Mixed
Asian or Asian British
Black or Black British
Chinese
Other (please write in)
Prefer not to say

Using the Disability Discrimination Action definition below, do you consider yourself to have a disability? “All physical or mental impairment which has a substantial and long term adverse effect on your ability to carry out normal day to day activities”.
Please tick one box only
Yes
No
Prefer not to say

Please can you give your full postcode below. This will be used to assess whether we are receiving responses from across London.
Please write in below

Are you employed by the NHS?
Please tick one box only
Yes No
Details of your organisation
Please complete this section if you are responding on behalf of an organisation. If you are submitting a personal response please go to Q1.

What is the name of the organisation you are submitting this response on behalf of?
Please write in below

Please tell us who the organisation represents and, where applicable, how you assemble the views of members:
Please write in below

Major trauma

Question 1. (page xx)
Please tick your preferred choice from the following options:
1. Three trauma networks, with major trauma centres at King’s College Hospital, St George’s Hospital and The Royal London Hospital OR
2. Four trauma networks, with major trauma centres at King’s College Hospital, St George’s Hospital, The Royal London Hospital and The Royal Free Hospital OR
3. Four trauma networks, with major trauma centres at King’s College Hospital, St George’s Hospital, The Royal London Hospital and St Mary’s Hospital.

Question 2. (page xx)
Why do you think this is the best option? Or use this space for any other comments.

Stroke

Question 3. (page xx)
Do you agree with our proposal on how we provide stroke care in the future?
Yes
No

Question 4. (page xx)
If not, what would you suggest and why?

Question 5. (page xx)
For good urgent care of stroke patients it is important to reach excellent quality care, fast. Do you agree that eight hyper-acute stroke units would provide the best urgent care for stroke patients in London?
Yes
No (If no, go to question 9)

Question 6. (page xx)
Do you agree our preferred option of hyper-acute stroke units at Queens Hospital, The Princess Royal University Hospital, The Royal London Hospital, Charing Cross Hospital, King’s College Hospital, Northwick Park Hospital, St George’s Hospital, University College Hospital will provide high-quality specialist care for residents of London?
Yes
No
Question 7. (page xx)
If not, please explain why you disagree.

Question 8. (page xx)
We have identified alternative sites which you may like to consider:
The Royal London Hospital OR St Thomas’ Hospital
Charing Cross Hospital OR Chelsea and Westminster Hospital
King’s College Hospital OR St Thomas’ Hospital
Northwick Park Hospital OR Barnet Hospital
St George’s Hospital OR Mayday Hospital
University College Hospital OR The Royal Free Hospital

If you don’t like our preferred sites, please tell us your alternative(s) from the list above and explain the reason(s) behind your choice.

Question 9. (page xx)
If you don’t like any of these proposals, what would you suggest and why?

Question 10. (page xx)
Do you think the proposed configuration of stroke units (below) will provide the best care possible for Londoners?
Yes
No

- Barnet Hospital
- Charing Cross Hospital
- Chelsea and Westminster Hospital
- King’s College Hospital
- Kingston Hospital
- Mayday Hospital
- National Hospital for Neurology & Neurosurgery (part of University College Hospital)
- North Middlesex Hospital
- Northwick Park Hospital
- Queen Elizabeth Hospital
- Queens Hospital
- St George’s Hospital
- St Helier Hospital
- St Mary’s Hospital
- St Thomas’ Hospital
- The Hillingdon Hospital
- The Princess Royal University Hospital
- The Royal Free Hospital
- The Royal London Hospital
- University Hospital Lewisham
- West Middlesex Hospital

Question 11. (page xx)
If you disagree with our recommended configuration of stroke services, please tell us your preferred option(s) and why.
Question 12. (page xx)
Do you think the proposed configuration of TIA services (below) provides the best possible care for Londoners?
Yes
No

- Barnet Hospital
- Charing Cross Hospital
- Chelsea and Westminster Hospital
- King's College Hospital
- Kingston Hospital
- Mayday Hospital
- National Hospital for Neurology & Neurosurgery (part of University College Hospital)
- North Middlesex Hospital
- Northwick Park Hospital
- Queen Elizabeth Hospital
- Queens Hospital
- St George's Hospital
- St Helier Hospital
- St Mary's Hospital
- St Thomas' Hospital
- The Hillingdon Hospital
- The Princess Royal University Hospital
- The Royal Free Hospital
- The Royal London Hospital
- University Hospital Lewisham
- West Middlesex Hospital

Question 13. (page xx)
If you disagree with our recommended configuration of TIA services, please tell us your preferred option(s) and why.

Next steps

Question 14.
The results of this consultation will be presented to the Joint Committee of PCTs which will make a decision on how services will be provided in future. We believe it is important that, along with the views of consultees, the committee consider:

- Which option is likely gives the best clinical quality for all Londoners, both once established and for years to come;
- Which option provides the best geographical coverage – particularly ensuring that no Londoner is more than 30 minutes travel time from a hyper-acute stroke unit;
- Which option is the best fit when considering the two services together (we believe there are advantages of locating hyper-acute stroke services with major trauma services wherever possible) or when considering other services or strategic objectives.

Do you agree with these criteria? Please tell us the reasons for your answer.
Glossary

Acute
In this document, acute refers to emergency or urgent treatment provided in hospital.

Blue light ambulance
A blue light ambulance is an ambulance, in responding to an accident or a health emergency, which uses blue lights and often sirens to alert other road users to it, allowing it to move swiftly through traffic.

Cardiothoracic
Cardiothoracic refers to the field of medicine involved with the heart (heart disease) and lungs (lung disease).

Clinical expert panel
A clinical expert panel is a group of medical professionals who have expertise in a certain areas. In the context of this consultation, they have consisted of clinicians, nurses, allied health professionals, London ambulance staff and social service representatives.

Clinicians
Clinicians are medical professionals who are engaged in the care of patients, such as doctors, nurses and therapists.

Consultant
A senior doctor who is a specialist in a particular area of medicine.

CT scan
The X-ray technique most commonly used to examine the brain.

Diagnostics
Medical tests used to identify a medical condition or disease.

FAST
FAST refers to the Face Arm Speech Test, an assessment tool used by paramedics to diagnose a stroke prior to a person being admitted to hospital. The test is outlined below:

Facial weakness - can the person smile? Has their mouth or eye drooped?
Arm weakness - can the person raise both arms?
Speech problems - can the person speak clearly and understand what you say?
Time to call 999

Haemorrhagic stroke
A stroke caused by a burst blood vessel bleeding into the brain or into the surrounding areas.

Hyper-acute stroke units
Hyper-acute stroke units provide the immediate response to a stroke, for the first 72 hours – or until a patient is stabilised.

Ipsos MORI
Ipsos Mori is an independent research company appointed by Healthcare for London to receive and analyse the responses to the consultation.
Ischaemic stroke
The most common type of stroke (around three quarters of all strokes) where blood flowing to the brain is blocked (by a clot or when blood vessels become too narrow).

Joint Committee of PCTs (JCPCT)
The JCPCT oversees the consultation and makes decisions and recommendations at the end of consultation. All consulting local NHS organisations are represented on the committee.

Joint Overview and Scrutiny Committee (JOSC)
The JOSC comprises representatives of all local councils in London. It considers the consultation proposals and arrangements, and whether the proposals are in the interests of the health of the local population.

London Health Forum
London Health Forum is a coalition promoting partnership between the voluntary and private sectors with the statutory sector in addressing the unmet health needs of Londoners and pathways to best practice.

Major trauma centre
A major trauma centre will provide 24 hour, seven days a week specialist emergency care, treating seriously injured patients, such as head injuries, gunshot wounds, stabbing victims and serious road traffic accidents. By being treated in a major trauma centre they will have direct access to the best network of specialities including neurosurgery, cardiothoracic, resident major trauma team and specialist rehabilitation services.

National Clinical Advisory Team (NCAT)
NCAT provides support, advice and guidance to NHS organisations on reconfiguration proposals to ensure safe, high-quality, effective and accessible services for patients.

National Stroke Strategy
The National Stroke Strategy, prepared by the Department of Health in 2007, provides a quality framework to secure improvements to stroke services in the UK.

NHS London
The strategic health authority for London with responsibility for all NHS healthcare services provided in London.

Patient pathways
A ‘patient pathway’ is the route that a patient will take from their first contact with an NHS member of staff (usually their GP), through referral, to the completion of their treatment.

Primary care trust
Primary care trusts are local NHS organisations which buy and provide healthcare such as GP care, hospital treatments and prevention services for their population.

Strategic health authority
The local headquarters of the NHS, responsible for ensuring that national priorities are integrated into local plans. It is responsible for performance of local NHS organisations.

Stroke Strategy for London
The Stroke Strategy for London is a strategy prepared by Healthcare for London which outlines how stroke prevention, acute stroke care, rehabilitation and community care services in London will be improved to meet world-class standards.
**Stroke units**
Stroke units provide ongoing care once a patient is stabilised, including multi-therapy rehabilitation.

**Thrombolysis**
Thrombolysis is a type of treatment using drugs to break up a blood clot. It is used to treat some patients who have an ischaemic stroke.

**Transient ischaemic attack (TIA) services**
A transient ischaemic attack (TIA) happens because of a temporary lack of blood to part of the brain and causes short-term problems. A TIA is sometimes called a ‘mini stroke’ but, unlike a stroke, the symptoms do not last and patients recover within a few hours.

**Trauma centre**
A trauma centre is located within a hospital’s accident and emergency (A&E) department and is where people with less serious injuries would be treated. Trauma centres will operate as part of a wider network with major trauma units at the centre. This will ultimately improve the organisation and communication within A&E departments.

**Trauma network**
Trauma networks will have a major trauma centre at its heart that will receive the most severe trauma cases; less severe trauma will be handled by first-class trauma centres at A&Es within the network. A range of rehabilitation services will be provided in each network.
Language translations with CES certification

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