NHS South East Coast

Regional strategy *Healthier people excellent care*

Healthier people, excellent care builds upon our ongoing work in the region to improve health and care including the *Regional Health Strategy*, the *Health Inequalities Strategy*, *Creating an NHS Fit for the Future* as well as the national Next Stage Review, *Our NHS, Our Future*.

Our vision has been discussed and refined over two years and after extensive consultation. Clinicians, experts from social care, and the voluntary sector worked in eight clinical pathway groups. They identified good practice throughout the region, examined gaps or barriers and described what needed to happen locally and nationally to deliver optimal care.

More than 100,000 staff, service users and organisations were informed about or involved in developing the vision and more than 2,500 people and groups provided feedback or took part in consultation events. Our consultation document was widely distributed throughout the region. The ensuing 15 week consultation involved more than 2,000 people and organisations.

We are building *Healthier people, excellent care* into the core business of the NHS across the region. The tools for implementation are the NHS South East Coast Operating Framework, and primary care trust Strategic Commissioning and Operational Plans.

Our focus is on three key areas – quality, innovation and productivity – and how we as a strategic health authority and regional headquarters of the NHS, empower the local NHS to drive change through clinicians on behalf of patients and the public. Developing leadership within the NHS is critical through which quality, innovation and productivity will flow.

The NHS is busier than ever before, treating more patients more quickly and to higher standards, at a time when economic challenges demand better value from public services. As demand for healthcare increases, the local NHS has to ensure it can meet patient needs and provide high quality services within the context of a changing society with increased expectations. Local services must be delivered in a way where advances in medical treatments, technology and research are being introduced at an accelerated pace.

We have been working on restructuring the strategic health authority, re-aligning roles, functions and structures, so that we can deliver our vision and its new priorities. NHS South East Coast has established a Quality Board to measure quality and improve care across our region.

The Quality Board is led by NHS South East Coast Chief Executive Candy Morris and includes senior regional NHS leaders, local clinical leaders and local government and patient representatives. The Board will push forward our vision and ensure commitment to our pledges to improve the quality of care, experience of patients and productivity of services across the region. To

support the Quality Board, a Quality Observatory has been established to monitor information describing the quality of services, their efficiency and evidence of how they might be improved.

Clinical pathway leaders, assisted by networks of clinicians, will oversee care pathway re-design, gather evidence of best practice and report on reviews of guidelines, service evaluations and outcomes. This work will be supported by the Quality Observatory and the clinical leads will inform and liaise with the primary care trusts' quality programmes.

What was the rationale behind the HPEC recommendation?

For acute care, the key recommendation is that by 2010 all appropriate heart attack, stroke and major trauma patients would receive the care from 24/7 specialist units.

This recommendation was based on evidence from the National Confidential Enquiry into Patient Outcome and Death Report[1] and evidence from the Trauma Audit Research Network (TARN) which identified the need for specialist care in order to optimise patient outcomes.

Similarly, national and international evidence indicates that the management of stroke is best delivered in units that have the capacity to perform urgent brain scans, administer thrombolytic (clot dissolving drugs) and provide patients with specialist assessment and support[2].

In the case of heart disease, thrombolysis is now being replaced by primary angioplasty wherein a fine tube is passed through the arterial system into the coronary arteries and the blocked artery is opened and sometimes supported with a metal stent. Again, this requires the co-ordinated services of a specialised unit [3].

What service changes have taken place across the region, and what changes are planned, in order to provide these 24/7 specialist units?

Stroke

Each acute provider now has a dedicated stroke unit that employs specialist staff trained in the management of stroke. These operate on a 24/7 basis. Each PCT has systems for delivering acute thrombolytic therapy (clot-bursting drugs) that have shown to have a beneficial effect on long-term outcomes for people who have suffered a stroke. NHS East Kent has commissioned a 'telemedicine' model from East Kent Hospitals University NHS Foundation Trust that uses the system to undertake investigation and assessment of

[1] (Trauma: who cares? National Confidential Enquiry into Patient Outcome and Death, November 2007)
[2] (The National Stroke Strategy for England, Department of Health 2007)
[3] (Boyle R. Mending Hearts and Brains: Clinical Case for Change; Department of Health, 2006)

stroke patients remotely from where the patient presents. NHS West Kent has commissioned a 'rota system' from Dartford & Gravesham NHS Trust and Maidstone & Tunbridge Wells NHS Trust who operate the rota between the 4 hospitals to provide a full 24hr/7 day a week service between them. This rota includes Medway NHS Foundation Trust. The formidable success of the 'telemedicine' system, (it recently won a national award) which has supported the effective treatment of high numbers of patients, has prompted NHS West Kent and NHS Medway to replace the current rota system with a telemedicine solution.

Cardiac

This has also been a significant success in Kent. The commissioners and providers have come together to make a single site for Primary Angioplasty which is shortly to be commissioned. This represents a significant achievement for commonsense, practical thinking and collaborative work and is something of which Kent can be proud.

An acute angioplasty service will be based in Ashford, at the William Harvey Hospital, which can be reached in less than the requisite 2 hours from anywhere in Kent. It will be opened in 2010 and will be the first unit to meet the HPEC pledge

Trauma

The management of serious trauma and head injury in the UK is sub optimal with mortality 40% higher than those countries which have networked organised trauma services. Kent is challenged because of its geography and demography. Major trauma and head injury should be sent directly to a regional centre, which for Kent has meant Kings College Hospital or St. Barts and the London Hospital as there is currently no centre in the South East Coast region.

Resolution is difficult because the preferred solution is to network Trauma units (TUs) with Major Trauma Centres, (MTCs) and the latter require a population of 2-4 million so a unit for Kent would not to be viable. The changes in London, (see below) will reduce our links with our traditional tertiary services and this is providing an impetus to resolve this. West Kent PCT is taking the lead in bringing together Kentish commissioners and providers to produce a viable solution. This is being supported at regional level by the SHA which will take a much more directly strategic approach in pressing for innovative solutions.

What is the definition of the different levels of trauma service, including 'poly-trauma'?

The severity of trauma is calculated based on an injury severity score (ISS) which reflects the severity of injury to various areas of the body. Generally, patients with scores of greater than 15 are regarded as having major trauma. It should be noted that in the National Confidential Enquiry into Perioperative Death, 62% of the 795 multiple trauma cases reviewed included head injury

Most trauma, whether affecting a single organ, such as a head injury or multiple organs, (poly-trauma) should be managed in local Trauma Units, (population 500,000), based in Hospitals provided with consultant led teams round the clock, with access to immediate scanning, theatre time and ITU facilities. These should be networked to an MTC, (population 2-4 million) with additional resources including; helicopter pad, cardiothoracic, neuro, vascular, maxillo-facial and plastic surgery s well as sufficient ITU facilities for those patients with severe trauma, (ISS>16) or GCS <9. The important message is that a network of hospitals linked to a major trauma centre can span the spectrum of severity. These systems lead to a reduction in multiple trauma mortality of 8% and a 50% reduction in overall avoidable deaths[4]

Can the SHA provide a map indicating where, across the region, these specialist units are located, or where they are planned to be located in the future?

Specialist stroke units are situated at:

Darent Valley Hospital, Dartford. (shared rota)

Kent & Canterbury Hospital, Canterbury (24hr)

Queen Elizabeth, the Queen Mother Hospital, Margate (24hr)

William Harvey Hospital, Ashford. (24hr)

Kent & Sussex Hospital, Tunbridge Wells. (shared rota)

Maidstone Hospital. (shared rota)

For each of these locations can you name the services provided and indicate whether they are available 24/7?

As mentioned above all the acute providers have a stroke unit that can provide dedicated stroke care from admission onwards. The Acute Stroke Units provide dedicated and specialist stroke care including thrombolysis. They provide rapid, early expert intervention and early rehabilitation for the acute stroke patient through a comprehensive pathway of care. Patients are looked after by an extensive multi-disciplinary team overseen by a specialist stroke consultant.

All major trauma centres, when fully online, will offer 24/7 care. As defined by Healthcare for London, a major trauma centre provides treatment to people with the most serious injuries 24 hours a day, seven days a week. These centres will have the equipment, facilities and teams of trauma experts to ensure effective diagnosis and early treatment of seriously injured patients.

[4] Nathens AB, Jurkovic GJ, Cummings P, Rivara FP, Maier RV. The effect of organised systems of trauma care on motor vehicle mortality. JAMA 200; 283: 1990-1994.

Patients in major trauma centres would then be transferred to local hospitals for ongoing care

The numbers of patients defined as having suffered 'major trauma' is low, being in the region of 300 per year (compared with around 1,600 per year in London). The volume of major trauma cases or potential major trauma cases work does not justify a major trauma centre development in Kent & Medway.

At the Fit for Future 'Galaxy' conference in July 2007 it was agreed that major trauma services for Kent and Medway patients would continue to be provided from the tertiary centres in London - principally Kings College Hospital and the Royal London. NHS London's 'Healthcare for London' consultation sought views on the model of trauma services in 2009 and confirmed these hospitals (with the addition of two other centres) will be the major trauma providers for London.

NHS London and London providers are currently working through the standards and pathways to ensure standards and networks are established.

What should a specialist stroke unit contain, what services should it provide and what hours should it be open for?

Each acute provider now has a dedicated stroke unit that employs specialist staff trained in the management of stroke. These operate on a 24/7 basis. Each PCT has systems for delivering acute thrombolytic therapy (clot-bursting drugs) that have shown to have a beneficial effect on long-term outcomes for people who have suffered a stroke. NHS East Kent has commissioned a 'telemedicine' model from East Kent Hospitals University NHS Foundation Trust that uses the system to undertake investigation and assessment of stroke patients remotely from where the patient presents. NHS West Kent has commissioned a 'rota system' from Dartford & Gravesham NHS Trust and Maidstone & Tunbridge Wells NHS Trust who operate the rota between the 4 hospitals to provide a full 24hr/7 day a week service between them. This rota includes Medway NHS Foundation Trust. The formidable success of the 'telemedicine' system, (it recently won a national award) which has supported the effective treatment of high numbers of patients, has prompted NHS West Kent and NHS Medway to replace the current rota system with a telemedicine solution. A business case is being prepared and funding has been agreed through the SHA Innovation Fund.

SEC Ambulance Service NHS Trust have provided extensive training for all call centre staff and have adapted their response for stroke calls to ensure an appropriate 'category A with transport' response is deployed in order to transfer patients to the closest operational acute stroke centre as quickly as possible.

The 2008 National Sentinel Stroke Audit generally showed improvements in care across Kent from the previous audit in 2006.

Darent Valley Hospital went from the middle half to the bottom quartile nationally. A complete pathway service improvement initiative has since led to subsequent improvement in a repeat local audit.

Kent & Canterbury Hospital went from the middle half to the top quartile nationally.

Queen Elizabeth The Queen Mother Hospital went from the lower quartile to the middle half.

William Harvey Hospital went from the lower to upper quartile.

Kent & Sussex Hospital stayed in the lower quartile. A series have improvements have since been initiated. A repeat audit is planned for January 2010.

Maidstone Hospital went from the lower quartile to the middle half.

Please provide an overview of the 3T development in Brighton and the impact of these changes on the people of Kent, including which areas are likely to be more affected than others.

Overview of the 3Ts development in Brighton

The Outline Business Case (OBC), approved last year by NHS South East Coast and currently under review by the Department of Health involves a proposed capital investment of £420 million, over the period 2010-2020, to deliver the Regional Centre for Teaching, Trauma and Tertiary Care at the Royal Sussex County Hospital site in Brighton. This is known as the 3Ts programme.

The aims of the programme are fully aligned with national, regional and local priorities and the commissioning intentions of the local primary care trusts. It is also a top priority for the SHA, and a key enabler for the region-wide NHS vision for healthcare and wellbeing across Kent, Surrey and Sussex - *Healthier people, excellent care*.

Investment objectives of the scheme

The investment objectives include:

- Replace the wards and other clinical accommodation currently in the Barry and Jubilee buildings on the Royal Sussex County Hospital (RSCH) campus with accommodation that is 'fit for purpose' and meets standards of privacy and dignity, in line with existing and emerging national priorities;

- Transfer the Regional Centre for Neurosciences from Hurstwood Park (on the Princess Royal Hospital site in Haywards Heath, some 15 miles from Brighton) and expand its capacity, in line with the Sussex-

wide *Tertiary Services Commissioning Strategy* (2008) and other commissioning intentions. This will allow patients from Sussex who currently have to travel to other centres (mainly in London) to be treated closer to where they live;

- Develop and expand non-surgical cancer services, in line with the Sussex Cancer Network's *Service Delivery Plan* and the Sussex *Tertiary Services Commissioning Strategy*. This will allow patients across Sussex to receive radiotherapy and chemotherapy treatment closer to where they live and will enable the Network to continue to meet national waiting times standards;

- Develop the Royal Sussex County Hospital as the Level 1 Major Trauma Centre for Sussex and the South East, as set out in the NHS' region-wide vision for healthcare in the South East Coast - *Healthier people, excellent care* (2008) and in line with Lord Darzi's report, *High Quality Care for All* (2008);

- Develop teaching, training and research activities within the Trust, in partnership with the Brighton & Sussex Medical School; Kent, Surrey & Sussex Deanery; and the Universities of Brighton and Sussex – again in line with Lord Darzi's vision of high quality teaching and research supporting high quality care.

Principle Benefits

- responds directly to the future strategic direction of the NHS by providing services and facilities that will support high quality patient care for all;

- responds to the regional strategy for developing specialist centres and a Level 1 Major Trauma Centre;

- responds directly to the future plans of the PCT commissioners across Sussex in providing capacity for local people to receive cancer, neurosciences and major trauma care locally;

- responds to the local need for providing modern, fit for purpose inpatient and diagnostic facilities for the people of Brighton & Hove;

- will provide the opportunity to further develop facilities for teaching and research and magnify the radiated benefits of this for the whole of the NHS across the South East for the next 20 years and beyond.

The 3Ts development will deliver tangible patient focused benefits, for example:

- fit for purpose accommodation - using evidence-based design to substantially improve the patient environment, maintain patient safety and reduce hospital-acquired infections;

- the 3Ts programme will provide almost 70% of its inpatient accommodation in single rooms – currently only around 5% of the services that form part of the programme are in single rooms;

- improved services for patients with stroke through the co-location of neurology and stroke inpatient services with good access to diagnostic imaging and treatment facilities;

- providing care closer to home: the 3Ts programme will provide the necessary capacity for neurosurgery and cancer care, with appropriate imaging and treatment support to allow many patients who currently have to travel out of Sussex for treatment to have that treatment closer to where they live;

- the 3Ts programme will also provide expanded capacity within the Sussex Cancer Network to continue to meet waiting times standards and allow patients to be accommodated and treated on the Royal Sussex County Hospital campus rather than having to travel daily to London centres for treatment

- extra capacity in specialist and tertiary care closer to where patient lives and a reduction in the number of people who have to travel to other centres, mainly London, for this care;

- the 3Ts programme will enable the Trust to become a Level 1 Major Trauma Centre at the hub of a Trauma Network for Sussex and the wider region. Key to this is the relocation of the Regional Centre for Neurosciences from Hurstwood Park and the development of appropriate capacity and treatment facilities on the Royal Sussex County Hospital campus.

Key Facts:

The Trust‘s preferred option is estimated to have a capital cost of £420 million. The preferred option has been developed in three stages over the period 2010 – 2020. The stages proposed are as follows, and it should be noted that these are subject to Department of Health approval following the review process that is currently ongoing:

Stage 1 (£319 million)

Trauma
Neurosurgery
Fit for purpose hospital accommodation

This stage is proposed to commence in 2010 and complete in 2014.

Stage 2 (£88 million)

Oncology
Fit for purpose patient accommodation
Teaching facilities

The stage is proposed to commence in 2015 and complete in 2018.

Stage 3 (£13 million)

Complete site rationalisation and car parking.

This stage is proposed to commence in 2018 and complete in 2020

The proposed development presents a unique opportunity to strengthen tertiary/specialist and secondary care services. It will significantly enhance the Trust's reputation for excellence as a University Teaching Hospital, providing opportunities for an ever closer partnership with the Brighton & Sussex Medical School and the Universities of Brighton and Sussex. Most importantly, it will provide significant improvements in access and clinical outcomes for the local populations of Brighton & Hove and for patients across Sussex and the South East.

Impact of these changes on the people of Kent, including which areas are <u>likely to be more affected than others</u>

The Trust and its local commissioners established a Sussex Trauma Network to look at the potential to develop a Level 1 Major Trauma Centre in Brighton. They worked with South East Coast Ambulance Trust (SEC Amb) and the emerging major trauma networks established through the Healthcare for London work.

The PCT and Trust at a meeting with Kent HOSC were asked for an estimate of the likely number of Kent residents which might fall within the trauma centre catchment and which wards these represented. The Trust used South East Coast Ambulance Service road ambulance travel times to model the equidistance between the Royal Sussex County Hospital and the next nearest major trauma centres, being the Royal London, St. George's Hospital, King's College Hospital and Southampton University Hospital. They then used population data at individual ward level to identify a logical catchment area. The analysis also included projected population growth to 2014. The Trust estimated the total workload of around 360 cases per annum in major trauma to be drawn from a catchment of 1.49 million.

The road travel times showed the catchment for the Sussex Trauma Network overlapping slightly with the West Kent and Eastern & Coastal Kent Primary Care Trust boundaries (and therefore with the Kent County Council boundary). The Trust modelling suggested that the following wards could fall within the Sussex Trauma Network catchment:

- Tunbridge Wells Borough excluding the northern wards of Paddock Wood, Frittenden & Sissinghurst, Capel, Southborough and Brenchley;

- Ashford Borough, but only including the wards of Oxney and Rolvenden & Tenterden West;

- Shepway Borough, but only including Lydd and part of Romney Marsh wards.

The Trust estimated that by 2014 there would be a population of around 100,000 in these areas which could translate to around 25 cases per annum – so quite a small proportion of the overall total. These were however planning estimates. The decision where to take a particular patient will be clinically driven and will depend upon the acuity of the patient.

What assessment has been made of the impact of the implementation of new major trauma and stroke services in London on care pathways for the population of Kent?

NHS South East Coast has commissioned its Acute Care Lead, Dr Steve Pollock to examine the management of serious head injury within the South East Coast Strategic Health Authority region. Extrapolating from national data, it is suggested that the SHA population of 4.2 million would generate around 76 moderate and 236 severe head injuries per annum as part of the multiple trauma toll. The report recognises that there is a need for clear referral pathways to tertiary centres that provide the range of care that these patients need, included specialist intensive care as well as neurosurgery. Furthermore, there is a need to develop appropriate rehabilitation pathways for these patients following acute intervention.

The distribution of severe or fatal road traffic accidents as documented by the Department of Transports research[5], shows that there is a wide geographic spread of these patients within Kent and that not all of the patients have ready access to the tertiary centre at King's College Hospital. In view of this, the Strategic Health Authority is proposing to establish a musculoskeletal network and to examine the options for the appropriate management of these patients in trauma units prior to referral to a major trauma centre.

In terms of stroke overall there will be no negative impact on stroke management in Kent. The dispersed telemedicine model adopted by South East Coast Strategic Health Authority may well prove superior to the centralised London model and the only downside will be for those very few stroke patients who require neurosurgery.

There are already problems of access for Kentish patients to neurosurgery beds in London. This is due to both the geographical distances particularly in

[5] source: Broughton and Buckle 2006

East Kent, the heavy local demand on the south London service, and to the peaks and troughs in the nature of major trauma. We are keeping closely in touch with developments in London, alongside our specialist commissioners. The final picture about London configurations is not clear at this point, but we need to anticipate that local patients are likely to receive priority in whatever emerges.

Are there any regional or local workforce issues which could delay the introduction of these specialist units?

Specialist stroke care units and specialist cardiac care units have been in place for some time and are well developed. Locally, as is the case nationally, there are some workforce issues regarding recruitment to stroke consultant posts and a high turnover of band 5 nurses. Having made so much progress we want to assure sustainability and are supporting the combined efforts of The Providers and Kent Cardiovascular Network in an ongoing recruitment process. The SHA in its system management and assurance role works with PCTs to assure the quality of workforce planning and development throughout the SHA area. This in turn support the SHA in its stewardship, on behalf of the SEC community, of medical and professional education and training funds (approx £250m) for services delivered through contracts with Higher Education Institutes and placement contracts with NHS providers.

What part do the air ambulance services play in these changes?

Kent air ambulance is an independent / charitable organisation which has 2 helicopters covering Kent. Kent air ambulance has 6 doctors and 12 paramedics (9 of whom are seconded from SECAMB). The majority of their work involves transferring patients to specialist centres following major trauma. They occasionally do transport patients following stroke if there are difficulties with roads or getting patients quickly to stroke centres.

Helicopters are an important component of rapid access to distant MTCs. However they can only fly in daylight and alternative methods of rapid transit, already in place for paediatric ITU, need further examination for adults. Transport of patients is a component of the 3T project in Brighton.