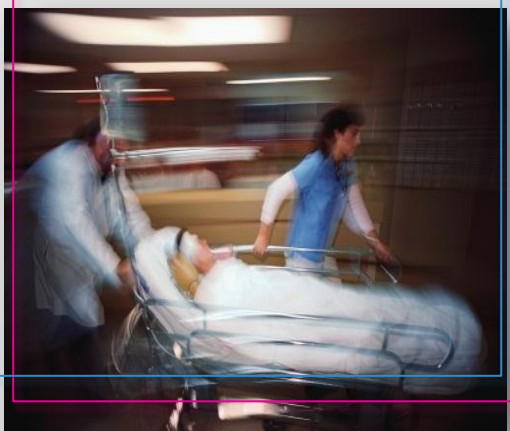


# Clinical case for reconfiguration of surgical services

Heart of England Foundation Trust

National Guidelines and Best Practice Evidence

March 2014



# Contents

- **National Opinion and Evidence:  
Case For Change**
- Trend towards consolidation
- Royal College Generic Standards for  
Emergency Surgery
- National Case Examples
- Trust Data Review

# Reconfiguration of hospital services across trusts is considered inevitable by many leading voices in the UK healthcare system

*“ ... reconfiguration of services across hospital sites is likely to be the only way that some trusts can achieve financial balance... and (should) focus on achieving best practice outcomes and patient experience ...”*

**– Keith Palmer for Kings Fund “Reconfiguring hospital services” 2011**

*“ ... there is increasing recognition that services such as emergency surgery may be unsafe out of hours and the provision of these services needs to be concentrated in fewer centers that are better able to provide senior medical cover ...”*

**– Kings Fund “Transforming the delivery of health and social care” 2012**

*“ ... it is increasingly clear that we must radically review the organization of hospital care if the health service is to meet the needs of patients. We must act now and we must act collaboratively ...”*

**– RCP “Hospitals on the edge: The time for action” 2012**

*“ ... the truth is that if we don't change the urgent and emergency care pathway from start to finish, we will simple repeat the mistakes of the past; timid, limited or disjointed initiatives will be insufficient ...”*

**– Bruce Keogh “Transforming urgent and emergency care services in England” 2013**

# The future state and delivery of emergency surgery are a major focus for the NHS and the Royal Colleges this year



- Growing appreciation from patients, staff and politicians that service needs to change
- Centralisation of specialist surgery services will improve outcomes
- Commonest concerns regarding patient transport must be addressed
- Any reshaping of service must be based on patient and staff benefit



- Sub-optimal delivery of care due to lack of understanding and investment in this high risk work load
- Significant changes to commissioning of emergency surgery services is required
- Consultant led services with dedicated leadership and MDT focus needed to drive improvements



- 5 pillars of future service:
- Better support for patients to self-care
  - Enhance NHS 111 service to get right advice first time
  - Provide urgent care outside hospital
  - Introduce Emergency Centres and Major Emergency Centres for the seriously ill
  - Connect providers into networks to break silos



- EGS is high risk and high cost to the NHS
- Lack of consistency of care leads to large variations in patient outcomes
- Currently major surgery difficult to audit due to range of disease and pathways used to treat
- Adhering to defined standards of care for these patients will reduce morbidity, mortality and cost



- Emergency surgery deserves same dedicated resources as elective surgery
- Requirement for clear separation of workload to deliver quality emergency and elective surgery
- Dedicated leadership and management of EGS required



- Emergency surgery challenged by limited workforce skill and availability despite increasing workload
- Emergency surgery mortality rates highly variable within UK and compare poorly to USA
- NHS England to implement A&E reconfiguration in next 3-5 years

# With surgical services failing to provide best outcomes nationally, things are likely to deteriorate under heavy intrinsic and external pressures

## Patients

- Increasing emergency surgical admissions
- 60% increase in elective surgery workload 1995-2013 (NHS data)
- Increased frail elderly: 2001-2011 saw the population of over 85 year olds increase at rate 3.5 X higher than rest of population (NAO, 2013.) Within 25 years, it is estimated that the population of over 65's will increase by 65% (Office of National Statistics.)

## Politics

- Increasing patient, public and political expectations
- 7 day working
- Duty of candour

## Work force

- Significant decrease in number of surgical trainees planned by LETB's: required to shift to GP and Psychiatry
- Increased level of sub-specialisation much earlier in career
- Decreased flexibility and availability of staff due to EWTD impact: College analysis shows a loss of 400,000 surgical hours owing to regulation

## Finances

- Public spending constraints set to remain
- Tight eligibility criteria for social care limiting service developments to funding from existing budgets
- Many trusts remain tied to heavy PFI debts
- £3.8 billion Better Care Fund to be pooled by taking savings from acute Trusts and allocating to integration of social care

## Current performance:

- UK mortality rate (MR) for major surgery is 4 X higher (i.e., worse) than USA for similar case profiles<sup>1</sup>
- Weekend MR for all emergency patients is 10% higher than for weekday admissions
- 55% of acute units have inadequate timely access to emergency theatres<sup>2</sup>
- < 20% of acute hospitals have a comprehensive interventional radiology service to support emergency work safely<sup>2</sup>
- Huge variation of practices and outcomes between Trusts performing emergency laparotomies<sup>3</sup>:
  - MR 15% (range 4%-42%)
  - Consultant surgeon presence in theatre ranged from 40%-100%
  - Post-op ITU admission ranged from 10%-88%
- ALOS of acute cholecystectomy in UK is 1 week vs 36 hours in other countries<sup>4</sup>

1 Comparison of P-POSSUM risk-adjusted mortality rates after surgery between patients in the USA and the UK; 2 ASGBI Issues in professional practice 2012; 3 Variations in mortality after emergency laparotomy: the first report of the UK ELN, British Journal of Anaesthesia June 2012; 4 The Future of Emergency Services, Iain Anderson, RCS Regional meeting Southampton

# Following a recent seminar, the RCS and NHS England are due to produce a report outlining changes required to improve emergency surgery

**Outcomes of round table seminar with Prof. Keith Willet, Nov 2013, will be summarised later this year and include:**

- The RCS and NHS England will be supporting and leading on proposals for reshaping emergency surgery delivery
- The separation of emergency and elective work at trust level will be advised where appropriate
- Trusts will be urged to consider the “hybrid” surgeon model, e.g., 1 week of elective operating followed by 3-4 days EGS
- Compulsory A&E training will be re-instated for all trainee surgeons to address workforce and skill challenges
- Commissioning guidance for clinical standards will be developed to reward high quality services and best outcomes



## Successful reconfiguration of services requires strong clinical and managerial leadership as well as public engagement from the outset

*“...We recognise the critical need for dedicated clinical leadership of EGS...To be effective, such leaders require the support of management, and the devolution of sufficient executive power as well as responsibility.”*

**– ASGBI “Emergency General Surgery: The Future” 2007**

*“ ... . Decisions about service redesign must be clinically led and clinicians must be prepared to challenge the way services – including their own service – are organised...”*

**– RCP “Hospitals on the edge: The time for action” 2012**

*“ ... The answer lies in part in finding more effective ways of engaging staff at all levels in developing new ways of delivering care and empowering them to make changes. Leadership of the highest order is required to make this happen both locally and nationally...”*

**– Kings Fund “Transforming the delivery of health and social care” 2012**

*“...Patients must be fully informed and involved in changes to their local services. Patients want to be active partners in their care. It is only right that they should want to be involved in the decisions around the provision of that care and treatment, in a process that is not tokenistic...”*

**– RCS “Reshaping Surgical Services: principles for change” 2013**

# Contents

- National Opinion and Evidence: Case For Change
- **Trend towards consolidation**
- Royal College Generic Standards for Emergency Surgery
- National Case Examples
- Trust Data Review



# As demand for surgery services continues to increase, separating elective and emergency resources has benefits for patients and staff

## Demand

- All emergency admissions have increased by 47% growing over the last 15 years<sup>1</sup>
- A&E attendances increased by 5.3% between 2009-2013<sup>2</sup>, with 20% on average requiring surgical review or admission (RCEM)
- Demand for elective surgery operations has increased by 60% between 1995-2013 (NHS data)
- An increasing ageing population will continue to impact the need for both emergency and elective surgery as this group of patients is more likely to suffer from disease requiring operations

## Benefits of dedicated emergency and elective beds, theatres and staff include:

- Reduce cancellations
- Achieve predictable workflow
- Increase quality training opportunities
- Increase supervision of complex emergency cases
- Reduce hospital acquired infection rates
- Enhance patient safety and experience
- Reduce unnecessary admissions
- Facilitate discharge
- Allow senior input for emergencies

1 <http://www.nao.org.uk/wp-content/uploads/2013/10/10288-001-Emergency-admissions.pdf>

2 <http://www.kingsfund.org.uk/blog/2013/04/are-accident-and-emergency-attendances-increasing>

# Consolidation of services into fewer sites has shown benefits in other specialties and is a concept supported by the RCS and ASGBI

*“ ... It is envisaged that where possible, major emergencies are centralised but patient assessment and lower risk surgery is delivered closer to patients’ homes...”*  
**– RCS / ASGBI Report: “Emergency General Surgery” 2013**

*“ ... Where there is clinical evidence supporting it, surgical reshaping will make optimum use of scarce staff and resources and provide high-quality training to enhance patient safety. With specialist resources and equipment in fewer locations, and a higher volume of patients with the same surgical conditions, staff will have more experience and expertise to ensure the highest patient safety levels...”*  
**– RCS Report: “Reshaping Surgical Services” 2013**

### Examples of consolidated services

- Stroke – London reduced number of hospitals treating acute CVA from 32 to 8
- Cancer services- The Cancer Plan, 2000
- Major trauma – designation of status to only 25 UK centers
- Acute MI – only 1/3 of NHS hospitals offer 24/7 PCA service for acute MI
- Pediatric cardiac surgery- concentrate care in 7 national centres

### Patient benefits

- Senior specialists readily accessible 7 days a week
- Narrowing of outcome quality gap through accelerated adoption of best practice models pathways
- Improved survival rates (as seen in case of stroke, MI, and trauma reconfiguration) despite further travel
- Improved patient experience

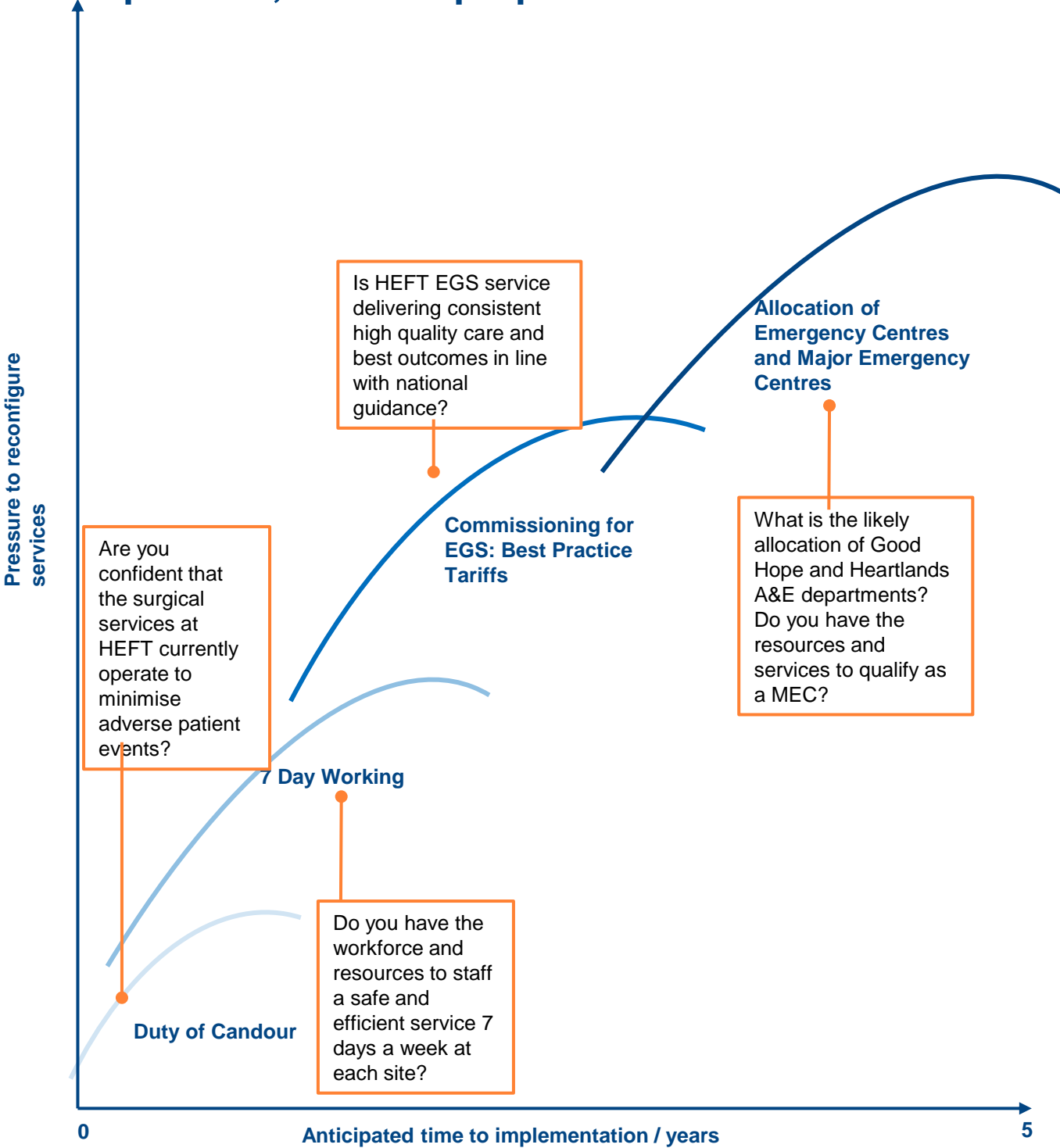
### Staff benefits

- More readily able to staff a 24-hour 7 days service rota
- Training and education improved for junior staff through critical mass
- Efficient consolidated services on 1 site more readily attract funding for expansion into more specialist centre
- Increased long term sustainability of service

# Contents

- National Opinion and Evidence: Case For Change
- Trend towards consolidation
- **Royal College Generic Standards for Emergency Surgery**
- National Case Examples
- Trust Data Review

# In coming years we will see increasing pressure on trusts to conform to national standards of care as well as new policies; is HEFT prepared?



# The RCS has developed generic standards for future models of delivery for emergency general surgery

## Standard

- Delivering an effective emergency general surgical service requires the entire team to be free of all other commitments, except in a few hospitals with low emergency workloads.
- The location of emergency patients within a single area greatly facilitates an effective service and enhances patient safety.
- Adequate consultant numbers required for a modern service, with junior or specialist nurse support.
- Immediate emergency theatre access required and in preference to elective work whenever necessary
- Adequate critical care support as needed (levels 1, 2 and 3)
- Be supported by a consultant based 24/7 diagnostic CT scanning service with GI specialist leadership
- Have access to a Trust wide or network interventional GI radiology service 24/7 on a published rota.
- Resuscitation should not delay surgery in patients in class 1 or 2. Resuscitation should be conducted in the anaesthetic room or similar.
- A consultant surgeon and consultant anaesthetist are present for all cases with predicted mortality  $\geq 10\%$  and for cases with predicted mortality  $>5\%$  except in specific circumstances where adequate experience and manpower is otherwise assured.
- A consultant surgeon (CCT holder) should be present for all unscheduled returns to theatre.

## Best Practice Patient Grading

- In order to minimise avoidable harm, patients require definitive treatment by surgery or similar intervention (most commonly interventional radiology) with an urgency which is graded and escalated according to the degree of illness.
  - On-going haemorrhage requires immediate surgery.
  - Septic shock patients who require immediate surgery are operated on within 3 hours of the decision to operate as delay increases mortality significantly.
  - Severe sepsis (with organ dysfunction) which require surgery, to be operated on within 6 hours to minimise deterioration into septic shock.
  - Patients with sepsis (but no organ dysfunction) who require surgery should have this within 18 hours.
  - Patients with no features to indicate systemic sepsis can be managed with less urgency but in the absence of modern and structured systems of care, delay will result in unnecessary hospital stay, discomfort, illness and cost.

# RCS generic standards for emergency urology services

- 24/7 consultant availability for immediate advice and can be on site within 30 minutes
- All emergency cases, especially those where operative intervention is planned, must be discussed with the consultant on call.
- A modern, effective emergency urology service requires adequate theatre access, senior radiological support (including interventional radiology), senior anaesthetic support and critical care facilities.
- Immediate 24/7 availability of:
  - CT scanning and ultrasound scanning with capacity for intervention in suspected urosepsis.
  - CT scanning for patients with suspected urinary tract trauma.
  - Senior trainee (ST3 or above) or consultant urologists to manage the obstructed bladder, which cannot be managed by urethral catheterisation alone.
  - Senior trainee or consultant urologist to operatively intervene for suspected torsion.
- Where an operation is required, a theatre team with adequate experience of urological surgery must be available.
- Outcomes of emergency treatment should be regularly audited.
- Patients with septic shock and evidence of obstructive uropathy require immediate intervention within three hours of the decision to operate as delay increases mortality significantly.
- The on-going care of inpatients/post-operative patients is managed by senior trainees and consultants, on appropriate urology wards with specialist-trained nursing care.
- Daily ward rounds carried out by senior trainees and/or consultants, including weekends.

# RCS generic Trauma and Orthopaedic Standards and Best Practice Metrics

- 7 day access to routine trauma lists which are independent of general emergency theatres. **Best practice:** An additional theatre is immediately available for urgent and complex orthopaedic problems, such as open fractures and those with neurovascular compromise.
- Trauma patients managed within regional trauma network. Complex injuries treated in centres with appropriate volumes within the region –this does not have to be the regional centre. **Best practice:** Appropriate triage by the ambulance service to minimise secondary transfers.
- Consultant led the trauma team 24/7 in all units receiving seriously injured patients.
- If CT scanning is to be performed in patients with multiple injuries, routine use of ‘top to toe’ scanning is recommended in the adult trauma patient if no indication for immediate intervention exists. **Best practice:** Within 30 minutes.
- Standardised transfer documentation of the patients’ details, injuries, results of investigations and management with records kept at the dispatching and receiving hospitals. Include documentation for acute transfer and standardised documents for repatriation to the base hospital for continued therapy and rehabilitation.
- Hip fracture care is in accordance with the British Orthopaedic Association Standards for Trauma (BOAST 1) and data is submitted to the National Hip Fracture Database. **Best practice:** Compliance with the best practice tariff for fragility hip fracture care:
  1. Time to surgery within 36 hours from arrival in an emergency department, or time of diagnosis if an inpatient, to the start of anaesthesia.
  2. Admitted under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon.
  3. Admitted using an assessment protocol agreed by geriatric medicine, orthopaedic surgery and anaesthesia.
  4. Assessed by a geriatrician in the preoperative period: within 72 hours of admission. Postoperative geriatrician-directed multi-professional rehabilitation team.
  5. Fracture prevention assessments (falls and bone health).
- Pelvic and acetabular fracture care in accordance with BOAST. **Best practice:** Regional protocols for initial emergency management.
- On identification of patients with a fracture of the pelvis or acetabulum in a non-specialist centre, referral is made within 24 hours. **Best practice:** Within an established trauma network, patients suspected of having sustained these injuries will be transported direct to the regional centre.
- Severe open lower limb fractures care is in accordance with BOAST aiming to achieve timely, specialist surgery rather than emergency surgery by less experienced teams. **Best practice:** Specialist orthoplastic care within a trauma network.
- Centres that cannot provide combined plastic and orthopaedic care for severe open tibial fractures have protocols in place for early transfer to an appropriate specialist centre.

# RCS generic emergency ENT standards and best practice care

- There is a dedicated ENT unit with immediate transfer to operating theatres.
- Emergency beds are available in the ENT unit for acute admission of either sex.
- Endoscopic cautery, suction and irrigation are available 24/7.
- Training in emergency ENT incorporated into nurse training modules
- Adequate facilities on paediatric ward or ED.
- Departmental protocols are in place detailing whether patients requiring resuscitation attend the ward or ED, with a clinically competent individual to be awaiting their arrival.
- There is a local, time- framed protocol detailing procedures from first contact to theatre, with or without flexible endoscopy referral. 90% of oesophageal foreign bodies are removed within 24 hours.
- 90% of sharp foreign bodies are removed within six hours.
- There is a written hospital protocol for initial management of ED or inpatient epistaxis prior to contacting ENT.
- At admission or next morning endoscopic examination is performed by ST3 or above/equivalent doctor, patients are treated and discharged if possible. Daily consultant management decision is recorded.
- Department has agreed written pathway for referral for angiography and embolisation including out of hours.
- Written guidelines of shared care between ENT and paediatrics are in place detailing provision of IV access, phlebotomy, daily review etc.
- Antibiotic treatment starts without delay once decision is made.
- Patients with orbital cellulitis require urgent ophthalmology opinion and CT scan with or without general anaesthesia available to manage complications
- Ability to carry out CT scan under general anaesthetic and transfer to theatre for drainage of parapharyngeal or retropharyngeal abscess.



# Contents

- National Opinion and Evidence: Case For Change
- Trend towards consolidation
- Royal College Generic Standards for Emergency Surgery
- **National Case Examples**
- Trust Data Review

# East and North Hertfordshire has seen a reduction in mortality rates following reconfiguration of its general and orthopaedic surgery services

## Background and changes

- The Trust moved to consolidate general surgery to address concerns over high mortality rates and unavailability of consultant staff when on-call
- In 2011, an ISTC 'surgicentre' took on the vast majority of the Trusts elective surgery workload resulting in **very small volumes of elective activity being managed across two sites** with orthopaedics particularly affected

## Case for change

- Patient safety risks - above average hospital standardised mortality ratio (HSMR) for general surgery
- Staffing challenges - emergency surgery on-call across two sites provided by consultants with elective commitments
- Inefficient use of staff and resources e.g nurses, theatres, equipment

## Reconfigured model

- **Centralisation of emergency general and orthopaedic trauma surgery** at Lister
- **Centralisation of fractured neck of femur services (FNOF) at a single site** (QEII) with;
  - dedicated laminar flow theatre
  - proximity to a physio gym and x-ray facilities
  - dedicated ortho-geriatrician pathway
- **Consolidation of all remaining elective services (not at ISTC) on one site**
- Use of more modern estate for day surgery services
- New critical care unit at the Lister
- New theatres blocks (to be completed by the end of 2014)

## Benefits

- **Reduced mortality**
  - **HSMR has improved** following centralisation (73.8 in 2012/13 compared to 110.6 in 2010/11)
- **Improved clinical outcomes**
  - Timeliness of FNOF surgery
  - Better alignment with national guidelines
  - Reduced LOS for emergency surgery and FNOF patients
- **Staffing improvements**
  - Improved consultant availability
  - improved theatre staffing
  - Better nurse/patient ratio (1:3) in ASCU
- **Improved facilities and better capacity**
  - New Acute Surgical Care Unit (ASCU)
  - New critical care unit at the Lister
  - New theatres blocks (to be completed by the end of 2014)

# East Kent Hospitals University FT is considering centralising emergency general surgery following a review by the Royal College of Surgeons

## Background

The Royal College of Surgeons were invited to review surgical services at East Kent Hospitals University Foundation Trust (EKHUFT) in 2012. The review was aimed at considering current service delivery against best practice and future models of care.

- Emergency general surgery (**EGS**) services **provided at 3 sites** across the trust – Ashford (WHH), Canterbury (KCH) and Margate (QEQM) with unselected surgical take
- **One of largest teaching hospitals** nationally – formed by merger of 3 acute Trusts
  - >0.7m catchment population
  - >6000 staff

## Review findings

### Case for change

The review identified **major challenges and significant variation in quality and resources** across sites

- **Quality concerns and issues with patient safety**
  - Lack of timely access to senior clinical input at some sites
  - Occurrence and sustained risk of major adverse events
  - Variable access to service adjacencies e.g. ICU, interventional radiology, vascular, urology, gynae, obstetric and paediatrics
  - Variable access to equipment
  - Lack of theatre capacity
- **Inability to meet adequate staffing levels**
  - Immediate challenges around provision of 24/7 consultant cover
  - Lack of middle grade doctors at some sites
- **Financial pressures**
  - Increasing cost of running surgical and other departments across 3 relatively small sites

## Recommendations and expected benefits

### Key medium to long-term recommendation

- Review recommended centralisation of services and reconfiguration using 'hub and spoke' model
- Key rationale for change is risk to patient safety and lack of sustainability
  - Preferred option – **single hub for EGS and major elective GI surgery and 2 spokes** (see other options below)

Options for change

- EKHUFT put forward 4 different options for review
  - No change
  - Single hub for high risk surgery and 2 other spokes
  - Single hub and 2 other spokes
  - 2 hubs and a spoke

### Benefits

Centralising EGS at EKHUFT expected to yield **better patient outcomes, patient experience and system sustainability**

- **Improved patient outcomes**
  - Ability to provide adequate consultant cover
  - Enhanced surgeon expertise
  - Better availability of middle grade doctors
  - Better access to service adjacencies e.g. ICU
    - Potential for development of integrated pelvic team (urology/colorectal/gynaecology)
- **Efficient use of resources**
  - More equitable access to equipment
  - Improved theatre capacity

# Hospitals serving South and West Birmingham consolidated vascular surgery services to deliver improved clinical outcomes for their patients

## Background

University Hospitals Birmingham FT (UHB) and Sandwell and West Birmingham Hospitals (SWBH) developed **a single clinical team for vascular surgery and consolidated major vascular surgery on a single site**

- SWBH previously ran a cross site vascular surgery service with emergency consultant cover provided jointly with UHB

## Rationale for reconfiguration

### Case for change

Improvement opportunities from reconfiguration identified include;

- **Clinical outcomes**
  - need to reduce morbidity and mortality rates
  - Inability to meet critical patient mass required to;
    - build and maintain expertise in more complex procedures
    - gain maximum patient benefit patients needing interventional radiology procedures
  - varied vascular surgery expertise
  - need to establish a recognised centre of excellence and support/undertake appropriate clinical trials.
- **Staffing and training challenges**
  - Inability to provide 24/7 rapid access to diagnostics, IR and emergency surgery
  - difficulty in attracting talent to small units
  - need to develop suitable training environment for vascular surgery
- **Sustainability**
  - inability to provide safe services meeting required national standards in an increasingly challenging financial climate

## New service model and expected benefits

Across South and West Birmingham all inpatient elective and emergency **vascular surgery now consolidated at new 'centre of excellence' at** UHB's new Queen Elizabeth Hospital

- Vascular Surgery day case, 23 hour surgery and outpatient activity continues to be provided locally at 2 SWBH sites
- on call consultant rota for vascular surgery continues to cover both Trusts

Expected benefits include;

### Improved clinical outcomes

- Alignment with national recommendations
  - 24/7 access to a specialist vascular surgery clinical team
  - 24/7 interventional radiology service
- critical mass of patients (i.e. 0.8m population) enabling clinical team to develop greater specialisation and undertake more complex procedures

### A new centre of excellence allowing;

- Undertake clinical trials and research
- Support specialist training
- Provide access to cutting edge facilities and technology
- Attract high calibre specialist staff.

# Bristol consolidated urological surgery onto a single site to improve clinical outcomes, patient experience and efficiency

## Background and changes

As part of a larger reconfiguration exercise, a single centre of excellence in urology in Bristol was created early in 2013 to deliver improved clinical outcomes for patients and provide better patient experience

- Services formerly provided at both University Hospitals Bristol (UHB) and North Bristol Trusts (NBT) into single 'hub' at North Bristol
  - In 2011/12, services was worth ~£17m with ~£12m at North Bristol Trust

## Case for change

- Consolidation was necessary to address;
  - Service variation
    - variability in patient experience
  - Inefficiency
    - inefficient use of consultant time from supporting a multi-site inpatient and surgical service
    - use of locum consultants due to difficulties with recruitment
    - difficulties making best use of clinical resources i.e. junior doctors; specialist nurses
    - duplication of staffing and equipment
  - Inequity in resources
    - patients access to clinical expertise and equipment determined by the organisation to which they were referred rather than clinical need
  - Capacity issues
    - preferred clinical option to release required theatre capacity and consistent with Trust's strategic plans

## Delivery model

- Hub and spoke delivery model with spokes providing routine outpatient appointments and some diagnostic services at various locations
- Consolidation of all surgical inpatient and day case urology services into hub at NBT
  - transfer of 18 staff from UH Bristol to NBT.
- New single point of referral for urology patients
- One stop outpatient clinics at Southmead Hospital and new South Bristol Community Hospital
- Consolidated research at Southmead Hospital as part of Bristol Urological Institute (BUI)

## Expected Impact

### Improved clinical outcomes

- Concentrated surgical and clinical expertise
- Shared/Standardised best practice methods across clinical teams
- Reduced complications and improved survival rates from strengthened research capability encouraging research and innovation in surgical techniques and treatment regimes
- Enhanced ability to attract national and international talent
- dedicated urology ward
  - Improved access to specialist urology consultant-led ward rounds
  - Access to specialist nurses

### Better patient experience and equity

- Single point of referral
- Improved communications – no barriers and lapses across multiple organisations
- Single waiting list management - Better and timely access to the right specialist and the right equipment

### Improved efficiency

- Minimisation of duplication and waste
  - Efficient use of consultant time
  - Efficient use of equipment
  - Reduced cancellations
  - Increased buying power