Report to:	**East Sussex Health Overview and Scrutiny Committee (HOSC)**
Date:	**4 October 2012**
By:	**Assistant Chief Executive**
Title of report:	**Shaping our Future – HOSC evidence gathering process**
Purpose of report:	**To set out progress with the Committee's evidence gathering process and to highlight key documentary evidence providing context for this meeting.**

RECOMMENDATIONS

HOSC is recommended to:

1. **Note the documentary evidence within the appendices and raise questions with witnesses as appropriate during the meeting.**
2. **Note the progress of the evidence gathering process.**

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1. Background

1.1 In June 2012 HOSC considered proposals for the reconfiguration of three services arising from the East Sussex Healthcare NHS Trust (ESHT) Clinical Strategy, known as *'Shaping our Future'*. The proposals, put forward by NHS Sussex in conjunction with ESHT and the emerging Clinical Commissioning Groups, involve reconfiguration of these specific services:

- Hyper acute and acute stroke care
- Emergency and higher risk elective (planned) general surgery
- Emergency and higher risk elective (planned) orthopaedics

1.2 The proposals are set out in full in a public consultation document available from www.esht.nhs.uk/shapingourfuture. Copies have previously been circulated to all HOSC Members. The public consultation process ran from 25 June to 28 September 2012.

1.3 In June, HOSC determined that the proposed changes constitute 'substantial variation' to services, requiring formal consultation with the Committee under health scrutiny legislation. HOSC agreed to undertake a detailed review of the proposals from July-October 2012 in order to prepare a report and recommendations based on evidence gathered from a range of sources.

1.4 The final decision on any change to the configuration of services will be made by the Board of NHS Sussex as the body which exercises statutory responsibility for the commissioning of services until April 2013. The NHS Sussex Board will be informed by the views of the Clinical Commissioning Groups, who will take over commissioning responsibilities from that date, and the view of the ESHT Board. Decisions will be made following consideration of the outcomes of the consultation process. This includes consideration of HOSC's report.

2. HOSC evidence gathering process

2.1 Four Committee meetings were arranged between July and October to enable HOSC to seek a range of views on the proposals from key stakeholders and to agree a report summarising the Committee's findings. Two evidence gathering meetings have already taken place on 26 July and 13 September 2012.

2.2 The July meeting focused on cross-cutting issues and views, including finance and perspectives from the Ambulance Trust, Clinical Commissioning Groups, Campaign Groups, Public Health and the Strategic Health Authority. The September meeting focused on the

proposals for stroke care, perspectives from the voluntary sector, and looked at how community health and social care services were being developed to support changes in acute care.

2.3 The planned areas of focus for the remaining two meetings are summarised below.

Date of meeting	*Theme/focus*
4 Oct 2012 10am – 1.45pm	• Orthopaedics • General surgery • Links to emergency care • Travel and transport
30 Oct 2012 10am – 1pm	• Outcome of public consultation • Review of consultation process • Consideration of HOSC's report

2.4 A range of stakeholders have been invited to attend each meeting to aid the Committee's understanding of the services subject to change and the potential impact of the proposals.

2.5 In addition, any unsolicited written submissions received by HOSC are being collated monthly into a supplementary information pack which is circulated to Committee Members and published on the HOSC website www.eastsussexhealth.org.

3. Documentary evidence

3.1 To make most effective use of HOSC's time, some further stakeholders were invited to submit written comments to the Committee for consideration if they wished. These included the six Members of Parliament covering East Sussex, the Local Medical Committee (LMC), and the Chair of the Joint Staff Side Committee (representing trade unions) at ESHT. No written comments were received directly in response to these invitations. A letter received earlier from Stephen Lloyd MP has been previously circulated to the Committee in the July 2012 supplementary information pack.

3.2 A range of documentary evidence has also been provided to the Committee to inform the consideration of specific aspects of the proposals at each evidence gathering meeting. The following documents are attached to provide general context to the discussion with attendees at this meeting:

- **Appendix 1**: Case for change: general surgery (extract from the pre-consultation business case (PCBC) produced by NHS Sussex and ESHT).
- **Appendix 2**: Case for change: musculoskeletal (MSK) and orthopaedic services (extract from the PCBC produced by NHS Sussex and ESHT).
- **Appendix 3**: Equality Impact Assessment (EIA) (an appendix of the PCBC produced by NHS Sussex and ESHT).

(The full PCBC is available from www.esht.nhs.uk/shapingourfuture)

3.3 The above local documents draw on key national guidance, available online, including:

- Emergency Surgery: Standards for unscheduled surgical care, Royal College of Surgeons, 2011:http://www.rcseng.ac.uk/publications/docs/emergency-surgery-standards-for-unscheduled-care
- Equality for all – delivering safe care seven days a week, NHS Improvement, 2012: http://www.improvement.nhs.uk/documents/SevenDayWorking.pdf
- Management of Hip Fractures in Adults, National Institute for Health and Clinical Excellence (NICE) Clinical Guidelines, 2011: http://www.nice.org.uk/guidance/CG124
- Elective and Emergency Surgery in the Elderly: An Age Old Problem, NCEPOD, 2010: http://www.ncepod.org.uk/2010eese.htm

3.4 Reports specific to individual agenda items are attached separately.

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(Please contact for paper copies of any of the documents mentioned above)

Item 5, Appendix 1

EXTRACT FROM:

East Sussex Healthcare NHS Trust and NHS Sussex

SHAPING OUR FUTURE: CLINICAL STRATEGY:

PRE-CONSULTATION BUSINESS CASE

Draft Version: 6.3

Date: 2nd July 2012

1. THE CASE FOR CHANGE – GENERAL SURGERY SERVICES

Clinical case for change

1.1 Currently general surgery at ESHT is failing to meet the desired standards for quality and patient experience and the service is unsustainable in its current configuration.

1.2 Evidence shows that general surgery should be managed by specialist surgical teams, with the necessary leadership, support and resources and to provide the very best quality patient care. Emergency services should be delivered in a timely manner, with acutely ill patients given priority over elective surgical care. Outcomes will be improved is senior decision makers are available to assess emergency patients early in the patient pathway. However this needs to be balance with the impact on patients if elective procedures are delayed or cancelled.

1.3 The current demand of providing emergency admission to two acute hospitals, with a small number of general surgeons, necessitates consultant surgeons undertaking elective duties whilst on-call for emergency surgery. This frequently results in delays in the diagnosis and operative management of emergency surgical patients and the cancellation of elective procedures and out patient clinics when emergency work is prioritised.

1.4 Delays to treating emergency patients poses a potential risk to the wellbeing of the patient and currently frequently results in operations taking place at night when this would be unnecessary if patients were assessed earlier. This is exacerbated by the limited availability of emergency theatre provision for general surgery during the working week and competition for emergency access at weekends at both acute sites.

1.5 Delays, last-minute cancellations and late-running clinics for elective general surgical patients also result in negative patient experiences. This can result from general surgeons prioritising emergency patients and demands on beds from emergency surgical and medical patients. It also means that the Trust is unable to meet the 18 week referral to treatment target for elective patients

1.6 The current frequency of on-call for general surgical consultants of 1:6 at EDGH (which will reduce to 1:4 following the implementation of a networked vascular surgery service) and 1:4 for the Conquest Hospital is unsustainable and is unlikely to attract high quality general surgeons in the future.

1.7 Currently the Trust has speciality specific general surgical wards and a surgical assessment unit on each site. At times of operational pressure these wards admit general medical patients. Although this provides a short term and safe solution it is not best practice and has caused infection control issues leading to ward closures, increased cancellations and difficulty in meeting standards. There are also significant negative impacts on patient experience with patients being treated in environments that are not designed to meet their needs.

1.8 Reducing length of stay for emergency patients is an essential quality standard and relies heavily on therapy support and medical management of complex co-morbidities. Currently there is variation in these services between sites and during the week. There is no dedicated medical/geriatric input, leading to limited medical management of co-morbidities potentially leading to delays in discharge.

1.9 Combining the general surgical consultants into a single on-call rota by providing emergency general surgery on one acute site allows the general surgeons workload to be designed to provide the optimal balance between emergency and elective service ensuring both are delivered to high standards. It would not be possible to provide this balance if the on-call rota continues to be provided on two sites without a significant increase in the overall number of general surgeons, however current and predicted activity levels do not support this increase in provision as there would be insufficient elective activity to provide full job plans for the additional consultants

1.10 Having a fixed proportion of a general surgeons time available for dedicated elective work will allow surgeons to develop supra specialisation skills such as laparoscopic surgery with the attendant quality and patient experience improvements. This will also support the Trust to recruit a higher quality workforce as future roles will support ongoing learning and development.

1.11 Providing emergency general surgery on one site will also provide a larger cohort of patients allowing the efficient provision of a dedicated general surgical emergency theatre throughout an extended working day and at weekends. Additionally a larger cohort of patients allows specialist staff in the theatre team and on the wards to develop a greater experience in the management of these complex patients and to utilise their skills fully.

1.12 Fundamental to the success of the proposed changes in general surgery provision are changes to the way general medicine is being delivered through the redesign of patient pathways and the provision of a new model of care. These changes are being implemented as part of the wider Trust strategy and have already demonstrated significant reductions in emergency medical activity which will reduce operational pressure and allow clearer separation of surgical and medical patients.

1.13 Single siting will also enable the development of enhanced recovery after emergency surgery a multidisciplinary approach that leads to reduced hospital stay and faster return to home or rehabilitation within a community setting.

About General Surgery

1.14 General surgeons treat a wide variety of major and minor colorectal diseases. This ranges from colonic and rectal cancer to haemorrhoids and includes inflammatory bowel diseases (such as ulcerative colitis or Crohn's disease) and diverticulitis, gastrointestinal bleeding and hernias. Some elements of vascular surgery are also provided under general surgery. Laparoscopic surgery is a relatively new specialty

dealing with minimal access techniques using cameras and small instruments inserted through 0.3 to 1 cm incisions. Gallbladders, appendices, and colons can all be removed with this technique.

Current service

1.15 Both elective and non-elective general surgery are currently provided through the two main acute sites at the Conquest Hospital and Eastbourne District General Hospital (EDGH) hospitals. Day surgery is provided in both acute hospitals and in Bexhill and Uckfield Community Hospitals.

1.16 Elective patients who have planned surgery as day cases or inpatients are seen in pre-assessment clinics provided on both acute sites. The pre-assessment clinics are nurse led and include anaesthetic assessment and cardiopulmonary exercise testing to determine the risk of surgery for higher risk patients. This service is currently not provided for all patients.

1.17 Emergency surgical patients are first assessed in the emergency department by triage nurses and/or emergency care doctors. If a surgical opinion is required these patients are then referred to the surgical assessment unit.

1.18 Surgical assessment units (SAU) are located on both acute sites. They receive referrals direct from GPs, together with internal admissions from the emergency department for emergency surgical assessment. At the Conquest the surgical assessment unit has 10 beds and a seated area based within a general surgical ward. At EDGH the surgical assessment unit is a separate unit with 11 beds plus a bay used for day assessments. Consultant assessment of emergency surgical patients is problematic because the general surgeons are programmed for other commitments whilst on call. This can lead to delays in diagnosis and treatment. Additionally, there is no programmed medical support for the surgical emergency patients with complex co morbidities.

1.19 Enhanced Recovery After Surgery (ERAS) is a multidisciplinary programme involving community and hospital staff that supports the provision of elective colorectal surgery on both acute sites. This programme is protocol driven and all appropriate patients are assessed pre-operatively and seen by the ERAS practitioner. A care and treatment plan is initiated before surgery including enhancing nutritional status pre-operatively and planning for the discharge phase of treatment. Following surgery the ERAS team works alongside the ward staff to support the recovery and expedite the pre-planned discharge. Implementation of ERAS has reduced length of stay for colorectal patients by an average of three days. The outcome evidence gathered to date demonstrates that further enhancements and extension of the service would be of value in reducing variation in the discharge process and ensuring a consistent and reduced length of stay for all elective general surgical patients and suitable emergency patients.

Activity

1.20 The current activity within general surgery can be split into the following:

ACTIVITY	
Nurse Led Clinics	9,801
Community Nurse Home Visits	471
Day Cases	5,763
Elective Inpatients	1,505
Elective excess bed days	519
Emergency Inpatients	4,936
Emergency excess bed days	2150
Outpatient First Attendances	5,763
Outpatient Follow Ups	6,336
Outpatient Procedures	2,882
Ward attenders	370
Activity as per SLAM (Service Level Activity Monitoring)	40,496

Table 10. General Surgery Activity 2011/12 as at Q3*[1]

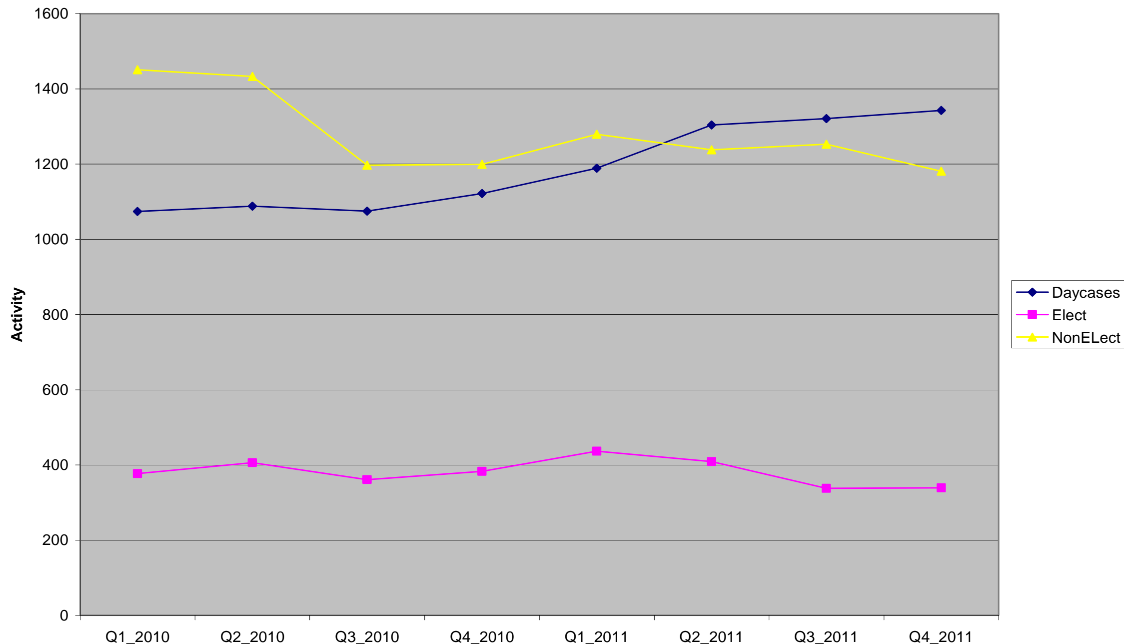

Chart 6. General Surgery Activity by Quarter (April 2010 – March 2012)

1.21 General surgery currently has a bed complement of 99 beds for both elective and emergency inpatients; with 43 elective and emergency beds at Conquest Hospital and 51 general surgical and five urology beds at EDGH.

1.22 Elective surgery is currently provided on both sites five days a week with 12.5 sessions per week at EDGH and 11.75 sessions at Conquest.

[1] * at the time of writing the final year end figures are not available and Q3 pro-rata is used

1.23 Emergency theatres are not available 24 hours a day for General Surgery on either site, although both main sites have resident teams for out of hours emergencies (on a resident basis). There is currently a dedicated emergency theatre for general surgery, each morning, Monday to Friday at the Conquest Hospital and an emergency theatre is available out of hours and at the weekends for use by all surgical specialties. At EDGH emergency requirements are supported by daily dedicated emergency surgical theatre lists and one dedicated theatre list daily at weekends with shared emergency theatres for the remainder of the time.

Staffing establishment

1.24 The general surgery workforce comprises medical, nursing and non-clinical staff. Middle grades and junior doctors are shared with breast and urology services and also support the ‘hospital at night’. The consultant breast surgeons do not contribute to the general surgery on call rota. The out of hours cover for breast surgery patients is provided by the general surgery on call team. The current establishment is shown below.

Workforce	**2011/12**
Consultants	*10.00
Middle grade	19.22
Junior	13.00
Registered nursing – surgical assessment unit	31.35
Unregistered nursing – surgical assessment unit	12.08
Registered nursing – inpatients	49.24
Unregistered nursing – inpatients	50.12
Specialist nursing/ Enhanced Recovery After Surgery	8.65
Non clinical staff	15.84
TOTAL FTE	**209.50**

Table 11. Current workforce

**Two consultants are combined vascular and general surgeons*

Clinical support services

1.25 Critical care, anaesthetics, theatres and day surgery are all required to support the general surgery service, with approximately 60% of surgical admission to critical care being admissions from general surgery.

1.26 General surgery is highly dependent on diagnostics particularly endoscopy, MRI and CT scanning. Most new outpatients and urgent patients assessed in the emergency department or surgical assessment unit require diagnostic tests including imaging.

1.27 Clinical laboratory diagnostic services are required to support all aspects of General Surgery provision. The range of cases means most have haematology, clinical chemistry and microbiology screening and many will require blood bank services. Blood diagnostics and blood banks are currently available 24/7 on each site and capacity is sufficient to meet the needs of the service.

1.28 No specialist clinical pharmacy support is provided to general surgery. Patient medication review and reconciliation by pharmacy technicians following admission and stock supply and individual patient dispensing is provided when required.

Health needs

1.29 The emergency general surgical operations most frequently performed are incision and drainage of abscess, appendicectomy and cholecystectomy. Abdominal infections (including peritonitis) and bowel obstructions (with or without ischaemia) form the sizeable but mixed group which contribute the majority of major operations, deaths and complications.

1.30 The impact of local demographics on surgical activity is less easy to predict than for some other specialties. The incidence of some types of cancer such as bowel is likely to impact on surgical activity and current public health awareness programmes and bowel screening are likely to lead to increases in surgical activity.

1.31 A significantly high percentage of all deaths in the 0-64 year olds are from cancer but the link between this and surgical activity is not direct. Death rates from all cancers for persons aged under 75 have seen a 25% decline in England over the last 15 years but cancer survival at one year in England is poor in comparison with other European countries. The general reduction in death rates has also been experienced in most parts of East Sussex with the exception of Hastings, which remains the only District/Borough in East Sussex with a death rate above that of England. There is evidence that late presentation of patients with cancer has an impact on survival rates. The population characteristics and deprivation in the Hastings area may mean late presentation is more likely and may result in more complex and more emergency surgical cases

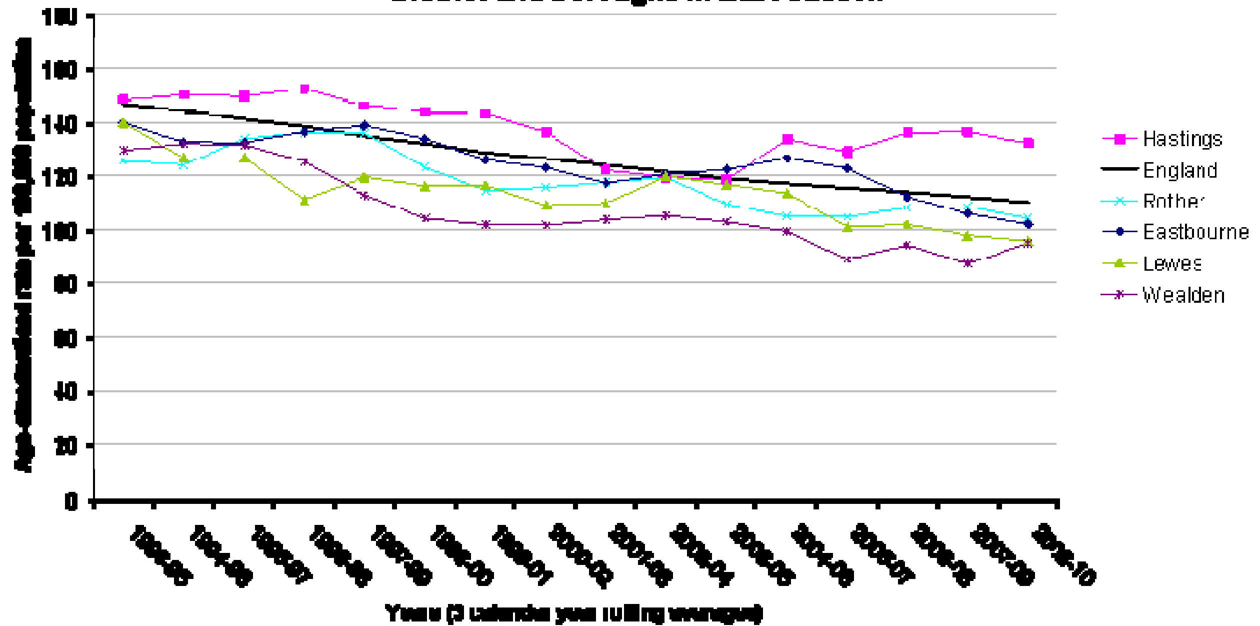

Chart 7. Age-standardised mortality from all cancers for all people under 75 years by District and Boroughs in East Sussex

Impact of commissioning plans

Vascular surgery

1.32 A Sussex Vascular and Interventional Radiology Network was established in November 2011 to address the findings of the August 2011 Sussex Vascular Review. ESHT is a stakeholder member of this network. An implementation plan has been agreed with centralisation of specialist arterial surgery at Royal Sussex County Hospital (RSCH), Brighton. A hub and spoke surgical model of care is being established to ensure a 24/7 surgical and interventional radiology service at RSCH alongside daily vascular surgical cover for diagnostic, day case and follow up care at all the linked spoke district general hospitals (St Richards Hospital in Chichester; Worthing Hospital; Princess Royal Hospital in Haywards Health; EDGH; Conquest; Crawley) which will support the co-dependent services such as diabetic foot care and renal access.

1.33 The intention is that all specialist vascular and interventional radiology procedures currently undertaken at Eastbourne will be moved to RSCH from November 2012. The vascular surgeons will work across the hub and spoke network of care. Some vascular interventional radiology will continue at the EDGH and Conquest sites as agreed by the network board and in line with British Society Interventional Radiology guidance.

1.34 NHS Sussex has aligned its planning with NHS SHIP[2] and NHS Surrey, presented to both East and West Sussex HOSCs and established a vascular patient and public involvement group with representatives on the network board to support the planning and service development.

1.35 The impact of the proposed commissioning plans for vascular services will be the loss of a small but significant number of major vascular surgical cases from the EDGH site with consequent release of theatre and critical care capacity. Additionally this will require the two combined vascular/general surgeons from EDGH to join the networked vascular on-call meaning they will not be available to support the Trust's general surgical on-call, reducing the available number of consultants for the general surgical on call rota to four per site.

Activity changes

1.36 In line with commissioning intentions, the implementation of the strategic commissioning goals and subsequent demand planning a reduction in general surgery activity is anticipated. Over the next five years this equates to a predicted reduction in elective activity with a marginal decrease in overall day case activity (in the context of an increase in day case activity as a percentage of overall general surgical activity). This is shown in the table below.

Area of activity	Assumed variation to activity
Elective activity	1% reduction (-12 patients)
Emergency cases	22% reduction (-1,073 patients)
Outpatients (first attendances)	12% reduction (-663 patients)
Day case	2% reduction (-84 patients)

Table 12. Impact on activity of strategic commissioning goals 2012/13 -2013/14

1.37 The national bowel cancer public awareness campaign has resulted in an increase in demand for services. The additional capacity required for colonoscopies is estimated at 20% to 30% above current activity levels. This will also necessitate a corresponding increase in outpatient appointments. Providers will be expected to achieve the national cancer standards for early diagnosis and treatment of cancer and to meet waiting time standards for this increased level of activity. It is not yet known whether this programme will result in a significant increase in the demand for cancer surgery or whether early diagnosis and treatment will have an impact on incidence of bowel cancer related surgical emergencies.

1.38 As activity reduces in line with the commissioning intentions and strategic commissioning goals the number of beds and outpatient slots required will be fewer and so will the numbers of medical and nursing workforce required.

[2] Cluster of four PCTs: NHS **S**outhampton City, NHS **H**ampshire, NHS **I**sle of Wight and NHS **P**ortsmouth.

Key drivers

1.39 The desired future model of care for general surgery has been based on the Royal College of Surgery guidance (2011) for Emergency Surgical Standards which state that

- Patients receive safe and high quality care and have the best care experience possible.
- Services are delivered in a timely manner, with acutely ill patients prioritised over elective surgical care.
- Services achieve the best possible clinical outcomes and follow established principles.
- Services provide information and support to patients and their supporters at all stages of the pathway.
- Services are provided by appropriately trained and competent healthcare professionals.
- Services are structured to deliver training in an efficient manner and ensure that the competing demands of training and service provision are adequately balanced.
- Services contribute towards the collection and collation of data to support evidence-based care.
- Facilities and resources are adequate and easily accessible.
- Services are efficient, effective and offer value for money.

1.40 In addition the requirements for delivering a high quality general surgery service have been clearly set out by the Royal College of Surgeons:

> "Surgery should be managed by a surgical team with the requisite skills and competences. In all cases, emergency surgery should be consultant-led to provide optimum care for the patient"
>
> "Delays in treating emergency surgical patients result in additional complications and higher mortality"
>
> "Studies have shown that the intervention of senior decision makers early in the patient's pathway improve outcomes for patients and make more efficient use of resources"

1.41 Evidence from NCEPOD also demonstrates that delays in diagnosis or consultant availability can result in operating out of hours with associated risk

1.42 Included in the model of care are improvements set out in *The principles of Seven Day Working – Equality for All* published by *NHS Improvement and Fulfilling the Potential; a better journey for patients* and *A better deal for the NHS* published by the Enhanced Recovery Partnership on behalf of NHS Improvement.

1.43 Stakeholders involved in the development of the ESHT Clinical Strategy stated their aspirations for services in the future including:

- specialist care is best provided in specialist centres
- people are prepared to travel for high quality services reducing cancellations

- rapid access to diagnostics and intervention should be provided
- planned discharge with multi-agency support should start prior to admission
- dedicated older people's support for early assessment of inpatient and discharge needs should be provided
- more post-discharge follow-up should be undertaken by community or primary care rather than acute outpatient departments.
- avoidable admissions should be minimised
- improved discharge planning should begin at admission and be informed by community staff with knowledge of the patient
- step up and step down support should be further developed
- multi-disciplinary teams should work across agencies
- nursing homes should be provided with education and training to support them to mange their patients
- community services should be extended to seven days a week

The model of care

1.44 The model of care is to provide

- Protected surgical beds.
- Consultant led rapid initial surgical assessment for emergency patients.
- Early involvement of the Enhanced Recovery Assessment Service for every patient who will benefit from it
- Less invasive surgery whenever possible with a focus on increasing day surgery rates further and ensuring day surgery patients do not stay overnight unless necessary.
- Core services over longer hours, including providing theatres from 8.00 am to 8.00 pm.
- A consultant physician available for all older patients to improve treatment of patients with co-morbidities.
- Assessment of those with non-specific abdominal symptoms by an experienced doctor to exclude surgical pathology.

Elective care

1.45 Elective pathways will be streamlined to reduce length of stay and increase early discharge and with appropriate care at home. There will be an increase in day case procedures and a corresponding increase in the use of all day cay surgery facilities. Discharge will be planned proactively during pre-admission for elective patients including the timely involvement of community and adult social care will be where appropriate. Elective beds will be protected where possible. Enhanced recovery will be in place early in the pathway to support timely, safe discharge.

Emergency care

1.46 Consultant led rapid initial surgical assessment will be provided for emergency patients. This will enhance patient flow as patients will be assessed by a senior decision maker in the surgical assessment unit and taken to surgery promptly. There will be dedicated emergency theatre sessions every day of the week. Enhanced

recovery services will be in place to provide support to patients seven days a week and ensure that they are discharged as soon as possible.

Day case surgery

1.47 There will be a greater focus on undertaking less invasive surgery whenever possible with a focus on increasing day surgery rates further to upper decile and ensuring day surgery patients do not stay overnight unless necessary. Surgical variation will be reduced, ensuring that all cases that could be provided as a day case are planned as day case. This will improve patient experience and support a reduction in capacity.

Outpatients

1.48 Outpatient services will continue to be provided from the two acute sites and from Bexhill and Uckfield Community Hospitals.

Older patients

1.49 Care for older patients will be improved through the involvement of a physician with an interest in geriatrics. This senior physician will be available for assessment of older patients and to improve the treatment and outcomes of patients with co-morbidities.

Enhanced recovery after surgery

1.50 The use of Enhanced Recovery After Surgery will be extended to a wider range of surgical patients and selected emergency patients. Enhanced Recovery After Surgery will begin at pre-assessment and will proactively plan the expected date of discharge and identify opportunities for expediting timely and safe discharge and ultimately reduce length of stay. This will improve patient experience through better preparation for discharge and better understanding of each step of the pathway.

End of life care

1.51 The model of care includes the use of the Liverpool Care Pathway, which is used in discussion with the patient, their carers and family.

Current challenges

1.52 By assessing current provision against the above model of care the following challenges have been identified:

Quality and Safety

Consultant on-call availability

1.53 The current demands of providing an emergency admission service to two acute hospitals and an elective operating and outpatient service with small numbers of consultant general surgeons on each site does not allow for the separation of the provision of elective and emergency services. These competing demands on the general surgeons' time frequently result in delays of senior assessment and surgery for emergency cases and the cancellation or delay of elective commitments.

Frequency of the consultant on-call rota

1.54 The current consultant on call rota is too onerous to be sustainable. Once the revised arrangements for vascular surgery are implemented the current surgical rotas will be 1:4 on both sites. However, the Royal College of Surgeons guidelines state that a 1:8 rota is the minimum. In order to achieve the Royal College of Surgeons standards for a consultant led emergency service, the current configuration of two small teams of on call surgeons, will be required to join into one emergency rota[3]. There is insufficient general surgical activity to support an increase in consultants on two sites to provide a 1:8 rota.

Theatre availability

1.55 There is limited availability of an emergency theatre for general surgery during the working day and at weekends at both sites. This can lead to delays in surgery or delays to other specialities emergency work.

Medical input

1.56 Currently there is no dedicated medical/geriatric input resulting in potential delays in the management of complex co-morbidities and delays to discharge. Currently, this service is provided as and when required, but leads to delays in diagnosis and treatment.

Patient Outcomes

Length of stay

1.57 There is variation in average length of stay, with a slightly longer length of stay for both emergency and elective surgery at the Conquest site. This is indicative of the variations in clinical practice and service provision that currently exists between surgical teams and sites

	Conquest	EDGH	ESHT
Elective	4.37	3.26	3.82
Emergency	4.57	4.01	4.29

Table 13. Average Length of Stay by Site (2011/12)

Infection control

1.58 Mixing specialty specific surgical wards with medical and care of the elderly patients, has led to infection control issues which have led to ward closures. This in turn impacts on cancellations and ability to achieve targets. Whilst the Trust has made significant progress in reducing the number of C Difficile and MRSA infections, Norovirus remains a concern with ward closures for general surgery in both January and February of 2012, affecting one general surgery ward on each occasion and a total of 20 patients. Separation of medical and surgical patients, in conjunction with the Trust's on-going works programme to provide single rooms, will go some way to address these issues.

[3]Royal College of Surgeons, Emergency Surgery: Standards for unscheduled surgical care Feb 2011

Patient Experience

1.59 As highlighted during stakeholder engagement, delays in emergency surgery, short notice cancellations or late running of clinics, impact negatively on the patients experience. This is a frequent occurrence as the consultant on call has concurrent elective and emergency duties that can impact on their ability to fully meet their commitments. Admitting both medical and surgical patients onto a surgical ward can also have a negative impact on patient experience.

1.60 There are difficulties in maintaining elective activity and ensuring that general surgical beds are protected for patients receiving general surgical care that result in challenges to achieving the 18 weeks referral to treatment target. Contributing factors are:

- the high levels of demand for emergency care for medical patients which means general surgical elective beds are utilised to provide care for these patients
- the high levels of demand for emergency surgical patient which means elective surgical beds are utilised to provide care for these patients

1.61 In 2011/12 there were 179 cancellations of elective general surgery on the day due to issues with bed availability.

Sustainability and affordability

Efficiency

1.62 The current model of holding allocated emergency theatre sessions on both sites 7 days a week results in both excess and unused capacity. In addition, there are quality and efficiency gains to be made through an increased volume of emergency work, which enables the provision of dedicated theatre and anaesthetics staff with specialist experience in the management of these complex cases, rather than the ad-hoc arrangements that currently exist.

Best practice tariff

1.63 The best practice tariffs for general surgery are related to overall rates of day cases and to two specific procedures being provided as day cases; laparoscopic cholecystectomies and hernias[4]. The current rates and the plans to increase day case rates to match national upper quartile ratios can be seen in the table below.

	2011/12 current	**2012/13**	**2013/14 (upper quartile)**
Day cases as % of total elective	79%	81%	83%
Laparoscopic cholecystectomies	36%	60%	87%
Hernias	67%	85%	95%

Table 14. Day case rates and associated Best Practice Tariffs (2011 – 2014)

[4]The British Association of Day Surgery, Day Case and Short Stay Surgery, May 2011

Waiting times

1.64 The Trust is marginally under-performing in relation to waiting time for treatment. The 18 weeks referral to treatment target up to Quarter 3 of 2011/12 is shown below; together with the 2 week cancer waits.

Target	Performance up to 2011/12 Q3
90% referral to treatment within 18 weeks for admitted	87.5%
95% referral to treatment within 18 weeks for non admitted (outpatients)	94.1%
93% 2 week wait cancer targets	95.7%

Table 15. 18 week referral to treatment targets and 2 week wait cancer target

Impact of diagnostic waiting times

1.65 Delays in accessing diagnostics have a negative impact on efficiency and performance. Delays for CT scans prevent early discharge, delays for MRI scans create constraints in the 18 week pathway whilst waits for endoscopy impacts on the units' ability to meet both non admitted, admitted and cancer referral to treatment targets. Timely, senior review will provide targeted and appropriate use of these pressured resources.

Options for delivering the model of care

1.66 The following options were put forward by the general surgery workstream as having the potential to deliver the model of care. This workgroup was multi-agency and comprised clinical staff, GPs, commissioners, LINk and other representatives of patients and carers.

1.67 The options relate to the configuration of services on the two acute hospital sites Eastbourne District General Hospital (EDGH) and Conquest Hospital, Hastings. Outpatient and day case service provided in community hospitals would not change.

Option 1	OPTION2	OPTION 3	Option 4
No change to the current configuration of service with improvements delivered through productivity and efficiency initiatives	**All emergency and all higher risk elective inpatient surgery/care provided on one acute site only** **Lower risk inpatient surgery/care and day case surgery provided on both acute sites**	**All emergency and all elective inpatient surgery/care provided on one acute site.** **Daycase surgery provided on both acute sites**	All emergency and all elective care including daycases provided on one acute site No surgical procedures undertaken on the other acute site

Table 16. Delivery options: General Surgery

Initial options appraisal

1.68 Four options were considered in detail for the future configuration of General Surgical services. Of these two options, (options 1 and 4) were eliminated at an early stage on the grounds that they would not be viable options for delivering the model of care.

1.69 The primary driver for the removal of option 1 was that it was considered that redesign alone could not deliver the model of care and reconfiguration was required because:

- In order to achieve the Royal College of Surgeons standards[5] for a consultant led emergency service, the current configuration of two small teams of on call surgeons would be required to join into one emergency rota. There is insufficient general surgical activity to support an increase in consultants on two sites to provide a 1:8 rota.

- Although a dedicated general surgery emergency theatre service could be provided on both sites it would not be sustainable to provide this 24 hours a day seven days a week as the volume of emergency activity would make this provision inefficient/ unproductive

- It would not be possible to invest sufficiently in increased medical input, seven day working, enhanced recovery after surgery and enhanced community services if the service was delivered on two sites. It would be more effective and productive if it was provided on one site to a larger cohort of patient.

1.70 The primary driver for the removal of option 4 was the impact on patients, with large numbers of patients being required to travel from one site to another, and the ability and cost of either site being adapted to accommodate the infrastructure required to deliver the services.

Options for Consultation

1.71 The two remaining options (option 2 and 3) are being put forward for consultation. Both include the need to undertake service redesign to contribute to the delivery of the model of care.

1.72 Both options 2 and 3 would make no change from the current provision of outpatient clinics or day case surgery.

[5]Royal College of Surgeons, Emergency Surgery: Standards for unscheduled surgical care Feb 2011

Option 2:

All emergency and all higher risk elective inpatient surgery/care provided on one acute site only (Site A). Lower risk inpatient surgery/care and day case surgery provided on both acute sites	
Emergency / Higher risk site (Site A) All higher risk elective surgery including major cancer cases would be carried out on Site A Site A would provide all emergency general surgical care. Elective day case and lower risk inpatient procedures would be carried out on Site A Site A would be a Designated Trauma Unit Elective/lower risk site (with overnight stays) (Site B) Day case and elective lower risk inpatient procedures would be carried out on site B No emergency admissions or higher risk elective surgery would be undertaken on Site B Site B would not be a Designated Trauma Unit	
Outline Options Appraisal	
Access and Choice	• Retains access to outpatient clinics and day case surgery as currently including on community/local sites. • Fewer patients having inpatient surgery would need to travel compared to option 3 • Provides choice between sites for day case and lower risk procedures • Patients booked for elective procedures would know where the procedure was to be undertaken and could plan accordingly. • More certainty for patients would lead to fewer cancellations and lengths of stay would be shorter as it would be easier for patients to plan their episode of care in advance • Emergency surgical patients would usually be taken by ambulance to the site set up to provide emergency care and this would result in some longer ambulance journeys than are currently experienced • Some patients and their carers/relatives will be required to travel further than currently
Quality and Safety	• Separate emergency and elective teams would enable a “Surgeon of the Day” to be freed up to deal promptly with emergencies • Enhanced Recovery After Surgery (ERAS) could be delivered better by concentrating the majority of specialist skills and substantive teams to support higher risk and emergency patients. • Provision of career grade surgical cover at site B would ensure surgical opinion available to medical patients out of hours. • Discharge processes would be developed from both sites to ensure timely safe discharge. • Middle grade doctors would be freed up to support ward patients. • Improved arrangements would put in place for providing a surgical opinion for medical inpatients on both sites • Assessment, stabilisation and transfer would be required for the elective site (site B) for patients that attend the emergency department and require emergency surgery assessment. • Surgical Assessment Unit would need to be able to manage the additional activity that will be referred from the elective only site (site B). • This option would make the more efficient and effective use of specialist staff and resources and provide the greatest opportunity to improve the quality of care across a range of indicators. • Bringing together all unscheduled care in one site would help to

	smooth the daily variations in demand, enabling better management of beds.
Clinical sustainability	• Surgeons would rotate between the sites and would work with both elective and emergency patients allowing maintenance of skills. • Surgeons would rotate into community and to Site B to provide daycase surgery in dedicated centres • Surgical nurse practitioners working at a higher level would compliment provision on Site A. • Co-locating staff groups would allow for greater flexibility to meet activity fluctuations and staffing cover
Financial Sustainability	• An increase in the proportion of minimally invasive surgery (laparoscopic) would drive down length of stay and release resources • The reduction in cancellations and outsourcing of work to third party providers would reduce current costs. • Costs would be higher than option 3 because of the need to provide surgical cover on site B • Costs of provision of out of hours theatres would be reduced • There could be some loss of activity and income if patients choose to go to other (nearer) providers for services
Deliverability	• Initial start up capital expenditure may be required as there are insufficient beds on a single site for this model and likely to need one extra ward to provide these additional beds. • Changes to the estate would be reviewed in terms of the unit size for an SAU. • Theatre capacity would also need to be assessed as will the impact on ITU and diagnostics. In addition, there may be support via telemedicine required to support cross site decision making. • Access to early diagnostics, anaesthetics, High Dependency Unit, ITU and emergency theatres would be available on the higher risk site and up and running 24/7. • Consultants would be trust based and would still work across the community hospitals to undertake day surgery as is current practice. All middle grades would need to spend time on higher risk/emergency site as part of their training • Training would be improved as trainees would experience working with consultants that are freed up to work with the higher risk patients and teach.

Option 3:

<table>
<tr><td colspan="2">All emergency and all elective inpatient surgery/care provided on one acute site (Site A). Day case surgery provided on both acute sites</td></tr>
<tr><td colspan="2"><u>Emergency / Higher risk site (Site A)</u>
All elective in patient surgery would be carried out on site A
Site A would provide all emergency general surgical care.
Site A would be a Designated Trauma Unit
Elective day case surgery and outpatients would be carried out on Site A

<u>Elective/lower risk site (with overnight stays) (Site B)</u>
Elective day case procedures and outpatients would be carried out on site B
No emergency admissions or inpatient elective surgery would be undertaken on Site B
Site B would not be a Designated Trauma Unit</td></tr>
<tr><td colspan="2">Outline Options Appraisal</td></tr>
<tr><td>Access and Choice</td><td>• Retains access to outpatient clinics and day case surgery as currently including on community/local sites
• All patients having inpatient surgery would need to travel to Site A so more patients would travel compared to option 2
• Patients booked for elective procedures would know where the procedure was to be undertaken and could plan accordingly.
• More certainty for patients would lead to fewer cancellations and lengths of stay would be shorter as it would be easier for patients to plan their episode of care in advance
• Does not provide a choice of site for lower risk inpatient surgery
• Emergency general surgical patients would usually be taken by ambulance to the site set up to provide emergency care and this would result in some longer journeys than are currently experienced.
• More patients and their carers/relatives will be required to travel further than in option 2</td></tr>
<tr><td>Quality and Safety</td><td>• The centralisation of all surgical emergency care on a single site would have implications for the emergency department on Site B as they could not take undifferentiated admissions without surgical cover
• Assessment, stabilisation and transfer would be required for the elective site (site B) for patients that attend the emergency department and require emergency surgery assessment.
• Surgical Assessment Unit would need to be able to manage the additional activity that will be referred from the elective only site (site B).
• Separate emergency and elective teams would enable a “Surgeon of the Day” to be freed up to deal promptly with emergencies
• Enhanced Recovery After Surgery (ERAS) could be delivered better by concentrating the specialist skills and substantive teams.
• Discharge processes would be streamlined and expert staff would be concentrated on a single site at all times
• All surgical expertise concentrated on a single site
• Out of Hours surgical cover for medical patients on Site B may be reduced
• This option would make the more efficient and effective use of specialist staff and resources and provide the greatest opportunity to improve the quality of care across a range of indicators.
• Bringing together all unscheduled care in one site would help to smooth the daily variations in demand, enabling better management</td></tr>
</table>

	of beds.
Clinical sustainability	• Surgeons would rotate into community and to Site B to provide daycase surgery in dedicated centres • Surgical nurse practitioners working at a higher level would be concentrated on a single site. • All middle grades/trainees would be concentrated on a single site for the majority of their training • Trainees would experience working with consultants who are freed up to work with the higher risk patients. • Middle grade doctors would be freed up to support ward patients.
Financial Sustainability	• An increase in the proportion of minimally invasive surgery (laparoscopic) would drive down length of stay and release resources • The reduction in cancellations and outsourcing of work to third party providers would reduce current costs. • Costs would be reduced as surgical on call rotas would operate on one site only • Costs of provision of out of hours theatres would be reduced • There could be some loss of activity and income if patients choose to go to other (nearer) providers for services. This is likely to be greater than in option 2
Deliverability	• More initial start up capital expenditure may be required compared to option 2 as all inpatient provision will be moved to one site. • Changes to the estate will be reviewed in terms of the unit size for an SAU. • Theatre capacity would also need to be assessed as will the impact on ITU and diagnostics. This impact would be greater than option 2 • Access to early diagnostics, anaesthetics, High Dependency Unit, ITU and emergency theatres could be streamlined but volumes would be larger than option 2. • Consultants would be trust based and would still work across the community hospitals to undertake day surgery as is current practice.

Preferred future configuration

1.73 The future model of care has been developed through a clinically-led review to establish the optimum model of care that aligns with the strategic vision of the trust as set out in the clinical strategy and to the stated strategic commissioning intentions. It also responds to current service challenges and the drive to improve the quality of service provision to the East Sussex population.

1.74 The preferred configuration for delivering this model is option 2 as it would result in fewer patients having to travel to receive their care than envisaged in option 3. It has been identified through clinical review, that if emergency general surgery and emergency orthopaedics are to be single sited they should be co-located to provide support for a Trauma Unit.

1.75 This option enables the protection of surgical beds and would help to reduce the number of operations cancelled by the Trust. This will enable the Trust to achieve best practice tariffs[6] and meet the cancer and 18 week referral to treatment target.

1.76 Additionally, cohorting emergency and higher risk patients would enable clinical staff to gain a depth of experience in the treatment of these challenging conditions and specialist workforce to be concentrated to support these patients. It would also provide enhanced training opportunities for junior surgeons. These measures would improve quality, patient experience and overall length of stay.

Older patients

1.77 Care for older patients would be improved through the rapid assessment, diagnosis and treatment from a consultant led service and the early involvement of a physician with an interest in geriatrics. This senior physician would be available for assessment of older patients and to improve the treatment and outcomes of patients with co-morbidities. This service can be more efficiently provided with this option that cohorts emergency and higher risk patients who are more likely to have increased and complex needs.

Preferred option: summary of services

1.78 The general surgery services **not changed** under the preferred option are:

- **Outpatients** – all current outpatient clinics including those provided in community hospitals would continue to be provided as they are now.

- **Day case surgery** – patients admitted for planned surgical procedures where they are not expected to require an overnight stay would continue to be treated in the current day case surgery provision on both the acute hospital sites and in community hospitals as they are now.

- **Planned lower risk procedures requiring inpatient stays** – patients having procedures considered to be lower risk and unlikely to require the patient to return to theatre would be undertaken on both acute hospital sites as now.

- **Diagnostic and support services** – these services which include rapid access to diagnostics including scanning and x-rays would continue to be provided on each acute site. On community sites diagnostic and support services would continue to be fully aligned to the needs of the general surgical services provided from the site.

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[6] Best Practice Tariffs

Best Practice Tariffs (BPT) are one of the enablers for the NHS to improve quality, by reducing unexplained variation and universalising best practice. With best practice defined as care that is both clinical and cost effective, these tariffs will also help the NHS deliver the productivity gains required to meet the tough financial challenges ahead. A specific model has been developed for each of the service areas, each tailored to the characteristics of clinical best practice in that area, as well as the availability, quality and flow of data.

- **ITU, HDU and recovery areas in theatre** – these would continue to be provided on each acute site.

1.79 The general surgery services that **would change** under the preferred configuration are:

- **Surgical Assessment Unit (SAU)** – a specialised SAU would be provided on one site only.

- **Emergency general surgical admissions and procedures** – in patient beds and theatre lists for patients requiring emergency general surgical care would be provided on one site only.

- **Planned higher risk general surgical procedures requiring inpatient stays** – provision for surgery and inpatient stay for patients having procedures considered to be higher risk would be on one site only.

1.80 This would be delivered by:

- **Day case surgery:** A decision on whether a patient would have a day case procedure would depend on both the nature of the procedure and the health of the patient. As currently, all patients would be assessed in advance of their admission for surgery in pre-operative assessment clinics; this would reduce the risk of a patient needing an unplanned inpatient treatment as a result of the procedure. Technological advances mean that the type and number of procedures that can be undertaken as day cases is increasing. The Trust has plans in place to increase the percentage of day case procedures it undertakes in line with national benchmarks although achieving upper decile performance represents a challenge given the age of the local population

- **Assessing patients for risk:** Nurse led pre-assessment clinics are will include anaesthetic assessment and cardiopulmonary exercise testing to determine the risk of surgery for higher risk patients

- **Planned lower risk procedures requiring inpatient stays:** On the site that did not take emergency general surgical admissions a career grade surgeon would provide the medical care for these patients and other inpatients on this site that may require a surgical opinion out of hours. Consultant support would be available in hours on site and on call out of hours

- **Surgical Assessment Unit (SAU):** GPs and SECAmb would assess all potential emergency surgical patients according to a clinical protocol and take those meeting the criteria straight to the surgical assessment unit at the site providing general surgical emergency care. Any surgical emergencies self presenting at the emergency departments would also be assessed by emergency department staff according to the protocol and if necessary transferred to the surgical assessment unit to ensure early senior medical review and treatment.

- **Providing surgical cover for Site B** Lower risk inpatients and medical patients on site B would be given access to a surgical opinion and cover out of hours. A consultant surgeon undertaking their elective responsibilities on Site B would have dedicated time set aside to review referrals from other specialties and follow up on surgical inpatients. Out of hours surgical cover would be provided by a career grade surgeon with a consultant on call.

- **Managing the impact of medical admissions into surgical beds** Fundamental changes to the way general medicine is delivered through redesign of pathways as part of the wider Trust strategy will reduce the operational pressures that result in patients being placed inappropriately in surgical beds and allow clearer separation of surgical and medical patients. In addition, the institution of winter pressure wards at times of known high demand will further protect surgical beds. On occasions when unpredictable pressure on beds occurs this will be mitigated as it is currently by utilising capacity on the other acute site.

- **Enhanced Recovery after Surgery service:** this service would be further developed working on both acute sites and in the community to support the timely discharge of patients

- **Designated Trauma Unit:** The site taking emergency general surgery admissions would also be the site taking emergency musculoskeletal/orthopaedic admissions and would become the designated Trauma Unit within East Sussex,

Impact of preferred configuration

1.81 The impact that the implementation of the preferred model of care has on activity for general surgery takes into account the strategic commissioning intentions which equate to a reduction in both emergency and elective inpatients of 16% and 19% respectively. Reductions in outpatient activity of between 8 and 11% are also required. A shift from inpatient to day case surgery leading to day surgery cases increasing by 6% will support the delivery of best practice tariffs in laparoscopic cholecystectomy and hernia operations.

1.82 Based on these levels of activity the number of beds required is set out in the table below. Surgical assessment unit bed requirements include assessment areas and the ability to treat and manage emergency patients who will have a length of stay of up to 72 hours. The inpatient bed requirements are based on the activity changes set out above, length of stay and optimal bed occupancy rates. For emergency care bed occupancy of 85% has been projected and for elective an occupancy of 90%. Changes in length of stay will be achieved by the improving the enhanced recovery after surgery service and ensuring that it is available to all patients who will benefit from it.

1.83 Future theatre capacity has also been modelled to ensure that there is emergency theatre availability seven days a week, supported by the appropriate consultant and medical staff, as well the appropriately skilled theatre workforce. An extended working day will ensure improved utilisation of the theatres seven

days a week. The requirements for general surgery have been planned in along side the overall requirements of all surgical specialties.

1.84 Analysis of the workforce impact of the preferred option has also been completed in line with the activity changes.

1.85 Consultant numbers are based the requirement to provide dedicated time for emergency and elective sessions within a sustainable on call rota. Options for providing appropriate out of hours consultant cover to both sites include operating a second on call rota; the requirement for this will be assessed once final service configurations are known.

1.86 Middle grade staffing numbers include eight career grade surgeons who will provide an out of hours surgical presence on the lower risk site; ensuring safety for lower risk surgical inpatients and providing first line surgical assessment for medical inpatients, gynaecological and obstetric patients if required. In order to improve the opportunities for recruiting to these posts they will also provide elements of in hours service including theatre lists, outpatient and ward duties. Allowance has been made for these additional activities to be built into job plans in assessing the number of post required.

1.87 Nurse staffing levels are also based on activity and allow for 1.12 WTE nurses (registered and unregistered) to each bed. This also allows the provision of one registered nurse for 6 patients based on an average occupancy of 85% as per RCN guidance [7]. The ratio of registered to unregistered staff increases significantly to 80:20 for surgical assessment unit beds and 70:30 for acute beds from current levels of 60:40.

1.88 Changes in staffing and activity have an impact on financial activity and this has been modelled and is set out in the table below.

[7] RCN Guidance on Safe Nursing Staff Levels, December 2010

Capacity	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Outpatient FA* clinics per week	14	12	12	12	12	13
Outpatient FU** clinics per week	15	14	14	14	14	15
Theatre sessions - elective	16	16	12	12	12	12
Theatre sessions - emergency	10	10	10	10	10	10
Theatre sessions - day surgery	8	8	10	10	10	10
Day case conversion	79%	81%	84%	84%	84%	84%
Length of stay - elective spell	4.1	4.1	4.1	3.9	3.7	3.5
Length of stay - emergency spell	5.1	5.1	4.8	4.5	4.3	4.1
Occupied Bed days - elective	6,160	5,596	4,636	4,506	4,379	4,256
Occupied Bed days - emergency	18,510	15,773	9,919	9,640	9,368	9,105
Beds - SAU	21	21	30	29	28	27
Beds - elective	31	31	14	14	13	13
Beds - emergency	47	47	32	31	30	29
Occupancy average - elective	54%	49%	91%	88%	92%	90%
Occupancy average - emergency	112%	96%	85%	85%	86%	86%

* FA = First attendance ** FU= Follow up

Table 18. Resource Impact – General Surgery

Workforce impact

1.89 Analysis of the workforce impact of the preferred option has been completed in line with the activity changes, which are in response to the commissioning intentions, increased day surgery rates and reductions in length of stay, detailed above and this can be found in the table below.

1.90 Consultant numbers are based on predicted future activity levels that take into account the strategic commissioning goals of reducing emergency admissions by 15% and the requirement to provide dedicated time for emergency and elective sessions within a sustainable on call rota. Options for providing appropriate out of hours consultant cover to both sites include operating a second on call rota; the requirement for this will be assessed once final service configurations are known.

1.91 Middle grade staffing numbers include eight career grade surgeons who will provide an out of hours surgical presence on the lower risk site; ensuring safety for lower risk surgical inpatients and providing first line surgical assessment for medical inpatients, gynaecological and obstetric patients if required. In order to improve the opportunities for recruiting to these posts they will also provide elements of in hours service including theatre lists, outpatient and ward duties. Allowance has been made for these additional activities to be built into job plans in assessing the number of post required.

1.92 Nurse staffing levels are also based on activity and allow for 1.12 WTE nurses (registered and unregistered) to each bed. This also allows the provision of one registered nurse for six patients based on an average occupancy of 85% as per RCN guidance[8]. The ratio of registered to unregistered staff increases significantly to 80:20 for SAU beds and 70:30 for acute beds

Workforce	
Consultants	10.00
Middle grade	19.00
Junior	12.00
Registered nursing – SAU	30.81
Unregistered nursing – SAU	13.55
Registered nursing – inpatients	37.06
Unregistered nursing – inpatients	15.46
Specialist nursing/Enhanced After Surgery Recovery	8.65
Non clinical staff	13.46
TOTAL FTE	**160.99**

Table19. Future workforce requirements

[8] RCN Guidance on Safe Nursing Staff Levels, December 2010

Financial Impact

Financial analysis £000's	2012/13	2013/14	2014/15	2015/16	2016/17
Total direct pay costs	-£9,939	-£9,040	-£8,289	-£8,213	-£8,103
Drugs	-£179	-£169	-£172	-£175	-£179
Other Non Pay	-£480	-£434	-£442	-£451	-£459
Supplies	-£437	-£416	-£424	-£432	-£440
Other Services	-£1,103	-£911	-£916	-£920	-£924
Pathology	-£928	-£919	-£923	-£928	-£932
Pharmacy	-£382	-£378	-£380	-£381	-£383
Radiology	-£842	-£837	-£841	-£845	-£849
*Theatres & ITU	-£4,563	-£4,235	-£4,260	-£4,286	-£4,311
Therapies	-£343	-£339	-£340	-£342	-£343
Commercial	-£2,197	-£2,087	-£1,983	-£1,884	-£1,790
Corporate Overheads	-£2,339	-£2,245	-£2,156	-£2,069	-£1,987
Total costs	**-£23,732**	**-£22,013**	**-£21,127**	**-£20,925**	**-£20,700**
Cost Savings		**£1,719**	**£886**	**£201**	**£152**

Table 20. Financial Impact – General Surgery

Appendix 6: Expected benefits tables

General Surgery: expected benefits as a result of the case for change

Improving patient experience

Expected outcome / benefit	Measures
Improved patient experience	• Improved patient experience feedback •
Reduction in the number of cancellations – brought about by having dedicated protected surgical beds with separate elective and emergency teams	• Number of cancellations on the day for lack of bed • Number of outliers: emergency and medical on elective wards
Reduced overall length of stay for elective and emergency patients	• Length of stay elective • Length of stay emergency • Excess bed days

Improving patient outcomes

Expected outcome / benefit	Measures
Improved patient health outcomes	• Reduction in emergency readmission rates • Increased number of patients with planned discharge date set on admission • Percentage of physician assessments undertaken for emergency surgical patients over 60 years
Reduced surgical site infections	• Surgical site infection rates

Quality and safety

Expected outcome / benefit	Measures
Availability of consultant-led rapid initial surgical assessment provided for emergency patients	• On call rotas meet RCS standards

Reduced waiting times for treatment	• Length of time on waiting list for elective procedures
	• Achievement of 18w RTT
	    • 90% for admitted
	    • 95% for non admitted
	• Achievement of 2week wait cancer targets (93%)

Enhanced care for older patients with involvement of a physician available to a wider group of patients	• Percentage of physician assessments undertaken
Development of the Enhanced Recovery After Surgery service	• Percentage of patients receiving ERAS assessment for discharge

Delivering sustainable services

Expected outcome / benefit	Measures

Achievement of best practice tariffs	• Achievement of upper quartile day case as a % of total elective
	• Achievement of upper quartile day case rates for
	    • Laparascopiccholesystectomies
	    • Hernias

Improved efficiency and productivity of services	• Workforce measures in line with national benchmarks •
Reduced acute activity in line with GP commissioning intentions	• Activity meets contracted levels

Item 5, Appendix 2

EXTRACT FROM:

East Sussex Healthcare NHS Trust and NHS Sussex

SHAPING OUR FUTURE: CLINICAL STRATEGY:

PRE-CONSULTATION BUSINESS CASE

Draft Version: 6.3

Date: 2nd July 2012

8 CASE FOR CHANGE: MUSCULOSKELETAL AND ORTHOPAEDIC SERVICES

Clinical Case for Change

8.1 Currently orthopaedics at ESHT is providing an excellent elective orthopaedic service with highly innovative practice and some of the shortest lengths of stay in the country. However there is a high cancellation rate of elective procedures means that the Trust is unable to meet the 18 week referral to treatment target for elective patients. There is also difficulty in providing timely high quality multidisciplinary care of emergency patients seven days a week. This means that despite the decreases already delivered in length of stay the missed opportunity to provide support over the weekend can significantly increase the time taken to return to home and optimal functioning.

8.2 Evidence shows that orthopaedic care should be provided by specialist teams, with the necessary leadership, support and resources and to provide the very best quality patient care. Services should be delivered in a timely manner, with rapid assessments for emergency patients and access to all the necessary specialists. ESHT has a uniquely elderly patient demographic that requires a high quality emergency orthopaedic service to support it.

8.3 Demands of the elective service mean that with the current configuration, it is difficult to provide consistent direct consultant supervision for the emergency service, meaning that junior orthopaedic surgeons are performing emergency orthopaedic surgery without direct consultant supervision or that complex emergency orthopaedic surgical cases requiring consultant presence are delayed until a consultant is available or elective cases are cancelled.

8.4 Dealing with orthopaedic emergencies quickly and effectively requires adequate access to dedicated theatres which are independent of general emergency theatres. Currently there is variation in the number and availability of dedicated orthopaedic emergency theatres between sites despite about equal numbers of emergency patients.

8.5 The current model of providing emergency orthopaedic surgery on two sites inherently causes difficulties in managing variations in patient numbers resulting in both under and over capacity, either wasting resources or causing delays to emergency orthopaedic surgery, mixing elective and emergency work, cancellation of elective surgical procedures and a negative impact on the quality of patient care and patient experience.

8.6 It must also be recognised that hip fracture is by no means an exclusively surgical concern. Effective management requires the coordinated application of medical surgical anaesthetic and multidisciplinary rehabilitation skills from presentation to follow up, including the transition from hospital to community. Experts agree that an ortho-geriatric service is essential to provide the best care for an elderly population. Currently ESHT has one ortho-geriatrician in post and has not been able to recruit

another. Similarly specialist therapy support is not consistently available seven days a week.

8.7 Currently the Trust has speciality specific orthopaedic surgical wards. At times of pressure these wards admit general medical patients. Although this provides a short term and safe solution it is not best practice and has caused infection control issues leading to ward closures, increased cancellations and difficulty in meeting standards. There are also significant negative impacts on patient experience with patients being treated in environments that are not designed to meet their needs.

8.8 Pooling the consultant orthopaedic surgeons to provide a single on-call rota by providing all emergency orthopaedics on a single site will enable cross cover to provide direct consultant supervision at all times. Reducing the frequency of on-call will also enable a greater proportion of a consultant orthopaedic surgeon's time to be available for dedicated elective work enabling further innovative development of this service

8.9 Additionally the larger numbers of patients that would result from single siting orthopaedic emergency surgery allows specialists within the theatre team and on the wards to develop greater experience in the management of these complex patients and utilise these skills fully. Similarly there are quality gains to be made through an increased volume of emergency work, which enables the provision of dedicated theatre and anaesthetics staff with specialist experience in the management of these complex cases, rather than the ad-hoc arrangements that currently exists.

8.10 It is anticipated that single siting orthopaedic emergency surgery with larger numbers of patients enabling the development of a dedicated unit with acceptable working rotas and skills development opportunities the Trust will be able to attract the best staff to deliver the key support services including ortho-geriatrics.

8.11 Fundamental to the success of the proposed changes in orthopaedic surgery provision are changes to the way general medicine is being delivered through the redesign of patient pathways and the provision of a new model of care. These changes are being implemented as part of the wider Trust strategy and have already demonstrated significant reductions in emergency medical activity which will reduce operational pressure and allow clearer separation of surgical and medical patients.

About Orthopaedics

8.12 Orthopaedic surgery is the branch of surgery concerned with conditions involving the musculoskeletal system. The musculoskeletal system is the system of muscles, tendons, ligaments, bones and joints in the body. Orthopaedic surgeons use both surgical and non-surgical means to treat musculoskeletal trauma, degenerative diseases, infections, tumours, congenital disorders and sports injuries.

Current service

8.13 Both elective and emergency musculoskeletal/orthopaedic inpatient, outpatient and day case services are currently provided from the two main acute sites at the Conquest Hospital and at Eastbourne District General Hospital (EDGH). Elective day cases and outpatients are provided at Bexhill and Uckfield Community Hospital. An outpatient only service is provided at Rye Memorial Hospital.

8.14 The majority of elective (planned) care pathways start with GP referrals to orthopaedic consultants for musculoskeletal (MSK) conditions they think may require orthopaedic surgery.

8.15 Elective patients who are having procedures such as joint replacement surgery (inpatient) or arthroscopy (usually day case) attend nurse led pre-assessment clinics and joint replacement schools as appropriate prior to surgery. Once they have had their surgery they are followed up either within the orthopaedic department by doctors, physiotherapists, surgical care practitioners or by their GP. ESHT has short lengths of stay for procedures such as hip and knee replacements and spinal surgery.

8.16 Emergency patients with suspected fractures are assessed in the emergency department by a triage nurse and/or Emergency Care doctors. These patients can also be referred for an orthopaedic opinion in the emergency department by their General Practitioner. From here they are either: admitted; referred to a fracture clinic or; discharged following treatment. The conditions seen as emergencies range from simple fractures to complex injuries. Patients treated as emergencies are frequently older people with multiple co-morbidities. GPs can also make direct referrals to the fracture clinics for follow up care.

8.17 Nurses and Allied Health Professionals (AHPs) from the ward provide outreach support through Assisted Discharge and Trauma Assisted Discharge services provide community based supported discharge for patients who have been inpatients. This supports a reduced length of stay and ensures safe transfer to home or normal place of residence.

8.18 The 2011/12 activity figures for these services are outlined in the table below.

ACTIVITY	2011/12 as at Q3
Nurse Led Clinics	10,741
Community Nurse Home Visits	384
Day Cases	3,252
Day case (Bexhill &Uckfield)	1,280
Elective Inpatients	2,761
Elective Excess Bed Days	390
Emergency Inpatients	2,510
Emergency Excess Bed Days	1,481
Outpatient First Attendances	20,424
Outpatient Follow Ups	32,181
Outpatient Procedures	8
Activity as per SLAM[1]	**75,412**

Table 21. MSK/Orthopaedic activity 2011/12 as at Q3

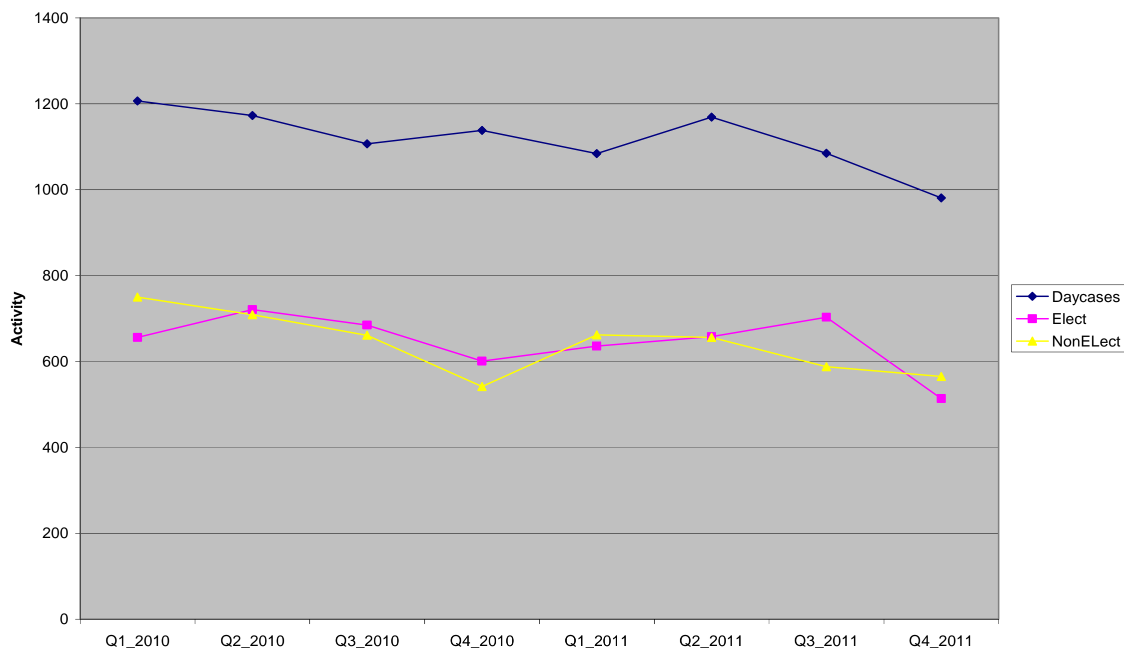

Chart 8. MSK / Orthopaedics Activity by Quarter (April 2010 – March 2011)

8.19MSK/orthopaedics currently has a bed complement of 43 elective orthopaedic beds across the Trust, with a 20 bedded ward at Conquest Hospital and 23 beds at

[1] at the time of writing the final year end figures are not available and Q3 pro-rata is used

EDGH. There are 57 emergency orthopaedic beds across the Trust, with 28 beds at Conquest Hospital and 29 beds at EDGH.

8.20 Elective surgery on both sites is currently undertaken five days a week with 18 sessions each per week at EDGH and Conquest Hospital.

8.21 Emergency theatres are not available 24 hours a day for emergency orthopaedics on either site, although both main sites have resident teams for out of hours emergencies (on a resident basis). There is currently a dedicated emergency theatre for orthopaedic surgery, each afternoon, Monday to Friday with all day lists on Wednesday and Friday at the Conquest and an emergency theatre is available out of hours and at the weekends for all surgical specialties. At EDGH emergency requirements are supported by a daily dedicated theatre list and a theatre session is available on Saturday and Sunday mornings.

Staffing establishment

8.22 The MSK / orthopaedic clinical unit's establishment consists of medical, nursing, Allied Health Professionals (AHPs) and administration staff as detailed in the table below.

Workforce	
Consultants	20.87
Ortho-geriatrician	1.00
Middle grade	21.29
Junior	16.00
Registered nurses - emergency	32.82
Unregistered nurses - emergency	37.03
Registered nurses - elective	27.63
Unregistered nurses - elective	25.26
TADs team	4.00
Outpatient nursing	15.52
Non clinical staff	27.61
Other clinical staff	13.70
TOTAL WTE	**242.73**

Table 22. Current workforce

In addition to the above, the service is supported by Allied Health Professionals across both sites.

AHPs	Current
Physio (band 5)	6.00
Physio (band 6)	2.00
Physio Asst.	2.00
OT (band 5)	2.00
OT (band 6)*	2.00
OT Asst.	2.00

Table 23. Allied health professionals

Clinical support services

8.23 Critical care, anaesthetics, theatres and day surgery are all required to support the orthopaedic surgical service.

8.24 Radiology services are provided by consultants and radiographers and include all diagnostic imaging services. Radiologists and diagnostic scanners are located on the two main hospital sites. Radiography services are provided in community settings at Bexhill, Crowborough, Uckfield and Lewes with one radiographer operating from each site who can undertake MSK and orthopaedic investigations. MSK and orthopaedic activity accounts for about 13% of all radiology activity. Most new out patients require diagnostic imaging.

8.25 Clinical laboratory diagnostic services are required to support all aspects of MSK/orthopaedic provision. The range of cases means that most have haematology, clinical chemistry and microbiology screening and many will require blood bank services. Blood diagnostics and blood banks are currently available 24/7 on each site and capacity is sufficient to meet the needs of the service.

8.26 Therapy services provide pre and post-operative input to emergency and elective wards to enable rehabilitation and to support planning for discharge to optimise independence. Details of the workforce are provided in the table above (Table 23: Allied Health Professionals).

8.27 No specialist clinical pharmacy support is provided to orthopaedics. Patient medication review and reconciliation by pharmacy technicians following admission and stock supply and individual patient dispensing is provided when required.

Health needs

8.30 The catchment population for the Trust is one of the oldest in the country. The incidence of both arthritis and of osteoporotic fractures increases with age. Demand for joint replacements is increasing year on year and evidence shows there has been a 10% increase in hip and knee replacements in England over the last two years. The increasing incidence of osteoporosis means that emergency

orthopaedic surgery capacity needs to match this demand. 1 in 2 women and 1 in 5 men suffer a fracture after the age of 50[2].

8.31 Overall older people account for a large proportion of surgical intervention and other treatment and care options related to orthopaedic services; this is predicted to rise in line with the demographic trend. For example, ESHT activity for primary knee replacement, hip replacement and revisions demonstrates that the majority of these procedures were carried out on the 55+ age range, peaking in the 75+ age range where approximately 20% of total activity is concentrated.[3]

8.32 The increasing age of the population determines that patients have multiple co-morbidities and ageing carers. This presents a particular challenge to the hospital treatment and rehabilitation of these patients.

8.33 A large proportion of MSK injuries are caused by falls and pre-existing osteoporosis Evidence suggests robust falls prevention schemes and treatment/prevention of osteoporosis may reduce the incidence and severity of these injuries.

8.34 The likely impact of the demography of the local population on increasing demand for orthopaedic services is fully understood by commissioners and a number of plans are in place to ensure that much of this demand can be met through services provided in community settings.

Impact of commissioning plans

8.35 Activity changes are predicted for musculoskeletal and orthopaedic services in line with commissioning intentions, the implementation of the strategic commissioning goals and subsequent demand planning, this also includes reduction in surgical variation.

8.36 The commissioning intentions include a 15% reduction in overall non-elective admissions this will include, a reduction in emergency admission and length of stay. There is also a planned reduction in readmissions; this will be delivered by ensuring a focus on referral management and redesigning musculoskeletal services to ensure an improved and integrated patient pathway, including a shift in activity to the community.

8.37 Day case rates are currently 61-66% in MSK/orthopaedics, with a drive towards meeting the national benchmarks (82%) by 2013/14. It is recognised that the number of very elderly patients treated within the Trust may make this ambition more difficult to achieve. If progress is made to achieving national benchmarks this will have a significant impact on lowering the requirement for inpatient capacity.

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[2] International Osteoporosis Foundation

[3] South East Public Health Observatory (SEPHO) 2011 update report: based on 09/10 HES data analysed with local SUS data.

8.38 The 2011 South East Public Health Report on Variations in Volumes of 47 Surgical Procedures and the South East Public Health Observatory (SEPHO) report suggested that the East Sussex area was an outlier for a range of Orthopaedic procedures. The activity targets are based on reducing the current activity levels to 2 standard deviations above the regional (South East Coast) mean. The project is focused on introducing best practice policies (including utilising Patient Decision Aids where available) to ensure a consistent approach to surgical intervention and patient involvement in decisions about their treatment options. The anticipated impact of this is a saving of £2.1m East Sussex wide. However as the demographics of ESHT are of an old and increasingly aging population achieving these targets may present a challenge.

MSK Pathway redesign

8.39 The pathway redesign covers a broad range of activity in particular orthopaedics, rheumatology, pain management and physiotherapy and is intended to reduce demand and improve the quality of services available to the local population. In brief this activity includes:

- a reduction in activity and capacity
- reduced arthroscopy activity in 2012/13
- a shift of MSK activity to community settings
- a redirection of resources from outpatient orthopaedics to support physiotherapy triage during the interim phase
- the commissioning of a fracture liaison service, through re-focussing of the existing community based falls teams
- the implementation of Sussex wide work on reducing volumes and variations
- a redevelopment of the low back pain pathway redevelopment, using map of medicine or equivalent
- a reduction in referrals from emergency department to orthopaedics, with a re-route to GP/primary care.

Integrated MSK Services

8.40 In the Hastings and Rother area it is anticipated that a new integrated MSK service will be implemented during 2012/13. The project has estimated that new service will cost commissioners £1m less than the existing service and the initial anticipated impact of this is a saving of £499k in 2012/13.

8.41 This will introduce a multi-disciplinary MSK service based in the community with the intention of reducing activity and spend in the acute setting, by offering an alternative model of care that supports patients in a co-ordinated way from the beginning of their patient pathway, including access to consultant, therapeutic and diagnostic services. A similar service specification is being developed to cover the remaining East Sussex area that will be built into future planning.

8.42 The predicted impact of the above commissioning intentions are shown on the table below (Table 24: Predicted impact on overall activity/impact of strategic commissioning goals) and have been factored in to the activity modelling for the future service.

Area of activity	Assumed variation to activity
Elective activity	6% reduction (-152 patients)
Emergency cases	14% reduction (-352 patients)
Outpatients (first attendances)	28% reduction (-5,750 patients)
Day case	5% reduction (-209 patients)

Table 24. Predicted impact on overall activity/impact of strategic commissioning goals

Key drivers

8.43 The desired future model of care for MSK/orthopaedic surgery takes account of the Royal Collage of Surgery guidance for Emergency Surgical Standards[4] which states that

- Patients receive safe and high quality care and have the best care experience possible.
- Services are delivered in a timely manner, with acutely ill patients prioritised over elective surgical care.
- Services achieve the best possible clinical outcomes and follow established principles.
- Services provide information and support to patients and their supporters at all stages of the pathway.
- Services are provided by appropriately trained and competent healthcare professionals.
- Services are structured to deliver training in an efficient manner and ensure that the competing demands of training and service provision are adequately balanced.
- Services contribute towards the collection and collation of data to support evidence-based care.
- Facilities and resources are adequate and easily accessible.
- Services are efficient, effective and offer value for money.

8.44 The Royal Collage of Surgery guidance states, "separating elective care from emergency pressures through the use of dedicated beds, theatres and staff can, if well planned and resourced, reduce cancellation and delays and achieve a more predictable work flow".

8.45 The key recommendations of the NICE/NCGS guidance on the Management of Hip Fractures in Adults 2011 and NCEPOD, 2010: An Age Old Problem have also been taken into account in developing the model of care. These include:

A physician or ortho-geriatrician should be involved in the care of patients presenting with hip fractures from presentation

- Early surgery within 36 hours
- Direct consultant supervision of anaesthesia and surgical teams.
- Multidisciplinary rehabilitation.
- An agreed plan of care will be developed to include discharge requirements

[4] Royal College of Surgeons, Emergency Surgery: Standards for unscheduled surgical careFeb 2011

8.46 Additionally the principles of Seven Day Working – Equality for All published by NHS improvement and Fulfilling the Potential; a better journey for patients and a better deal for the NHS published by the Enhanced Recovery Partnership on behalf of NHS Improvement are included in the model of care.

8.47 Examples of best practice have been considered including a case study in 'Equality for all', from the Oxford Radcliffe Orthopaedic trauma service that states:

> 'Oxford Radcliffe Orthopaedics Trauma Service team provides a 24 hour, 365 days a year consultant led and delivered orthopaedic trauma service. Two philosophies of the Oxford Trauma service are:
>
> - A philosophy of care: That all medical diagnoses and treatment should be carried out either by, or under the direct supervision of a fully trained consultant surgeon
> - A philosophy of training: Every clinical experience should be a learning opportunity (irrespective of the time of day)
>
> In order to achieve this service successfully a multidisciplinary working approach to decision making which includes senior nursing staff and allied health professionals has been established. '

8.48 Stakeholders involved in the development of the ESHT Clinical Strategy stated their aspirations for services in the future including:

- Specialist care is best provided where in specialist centres and people are prepared to travel if the quality is right
- Reducing cancellations
- Rapid access to diagnostics and intervention should be provided
- Planned discharge with multi-agency support should start prior to admission
- Dedicated older people's support for early assessment of inpatient and discharge needs should be provided
- More post-discharge follow-up should be undertaken by community or primary care rather than acute outpatient departments.
- Avoidable admissions should be minimised
- Improved discharge planning should begin at admission and be informed by community staff with knowledge of the patient
- Step up and step down support should be further developed
- Multi-disciplinary teams should work across agencies
- Nursing homes should be provided with education and training to support them to mange their patients
- Community services should be extended to seven days a week

The model of care

8.49 The model of care will provide:

- Protected beds for elective trauma and orthopedic patents
- Consultant led rapid initial assessment for emergency patients
- All patients older than 60 years old will have input from an ortho-geriatrician within 24 hours of admission.
- Community based MSK triage service

- Consultant led rapid initial surgical assessment for emergency patients.
- Less invasive surgery whenever possible with a focus on increasing day surgery rates further and ensuring day surgery patients do not stay overnight unless necessary.
- Core services over longer hours, including providing theatres from 8.00 am to 8.00 pm.
- Extension of the trauma assisted discharge service across the Trust to facilitate timely discharge. The enhanced recovery service will be extended to trauma patients as well as elective patients.

Emergency model of care

8.50 Pathways will be streamlined from emergency care to early senior medical review. Length of stay will be further reduced with the extension of the trauma assisted discharge service across the Trust and a greater use of community rehabilitation beds. Senior specialist MSK / orthopaedics medical staff will be called upon by the emergency departments to provide assessment and decision making at the earliest opportunity. Evidence has shown that more senior and experienced staff are less risk averse and able to make decisions that will reduce the number of people being admitted to acute care who do not need to be and ensure that the right package of care is initiated earlier.

Elective model of care

8.51 Pathways will be streamlined for elective patients to reduce length of stay and increase early supported discharge, with appropriate care in place at home or normal place of residence. There will be an increase in day case procedures and an increase in the use of day surgery facilities.

8.52 There will be pharmacy input to pre-admission clinics so that the use of patients own medicines are optimised pre and peri-operatively. Medication requirements will also be planned to facilitate rapid discharge in the interests of the patient.

Day case surgery

8.53 There will be a greater focus on undertaking less invasive surgery whenever possible with a focus on increasing day surgery rates further to upper decile and ensuring day surgery patients do not stay overnight unless necessary. Surgical variation will be reduced, ensuring that all cases that could be provided as a day case are planned as day case. This will improve patient experience and support a reduction in capacity.

Older patients

8.54 All patients older than 60 years and those with complex needs will have input from an ortho-geriatrician within 24 hours of admission. An agreed plan of care will be developed for emergency patients that will include establishing their discharge requirements within 72 hours. For patients admitted for elective procedures discharge plans will be established pre-admission.

8.55 All patients who meet the criteria for an end of life pathway will be managed appropriately. This will include the use of the Liverpool Care Pathway.

Musculoskeletal triage

8.56 The community based MSK triage service will be run by Allied Health Professionals who will assess and triage patients so that only those patients requiring surgery are seen by a surgeon. It is expected that this service will considerably reduce demand for surgical assessment and surgery in the acute service.

Outpatients

8.57 Outpatient services will continue to be provided from the two acute sites and from Bexhill and Uckfield Community Hospitals.

Community rehabilitation

8.58 This will be a multidisciplinary team led service which will support the seamless movement of patients between all stages of their care removing delays and reducing length of stay. Rehabilitation will be provided either at home or in community beds. There will be closer working with the neighbourhood support teams which comprise adult social care and community matrons to prevent avoidable admissions, hospital readmissions and prevention of falls.

Primary care

8.59 The service will work with primary care to increase knowledge and competency to improve referrals. This may include access to telephone advice and support to GPs to enable them to determine those patients that do need to be admitted. Development of community based preventative services, such as the falls prevention service, will reduce the need for acute admissions.

Strengthening medical input

8.60 Across both acute sites there is a need to strengthen medical input into hip fracture and other complex orthopaedic pathways in order to improve patient outcomes and achievement against the best practice tariff requirements. This will require the development of a specialist ortho-geriatric service and the recruitment of specialist ortho-geriatricians. Previous experience has shown that delivery of a well-defined specialist service is more likely attract applicants to specialist posts.

Current challenges

8.61 By assessing current provision against the above model of care the following challenges have been identified:

Quality and Safety

Consultant availability

8.62 Currently there is difficulty in providing a consistent consultant led emergency service to ensure early senior decision making in the diagnosis and treatment of orthopaedic patients.

Theatre availability

8.63 Currently, there is not 24 hour a day access, on both sites, to an emergency theatre. This is restricted by competing theatre demands from other specialities. Often, emergency cases are added to or replace elective lists. This may result in delays in surgery for patients with a consequent impact on the quality of their care. A unit accepting orthopaedic surgical emergencies needs seven day a week access to emergency lists which are independent of general emergency theatres[5].

Medical input

8.64 An ortho-geriatric service is essential to provide a high quality service for the elderly orthopaedic population and to attain best practice tariff. “Hip fracture is by no means an exclusively surgical concern. Effective management requires the coordinated application of medical surgical anaesthetic and multidisciplinary rehabilitation skills from presentation to follow up, including the transition from hospital to community.”[6]

8.65 Currently, the EDGH site has one ortho-geriatrician. This does not meet the aims of providing a seven day a week service to ensure equality of care. The Conquest Hospital has so far failed to recruit to an ortho-geriatrician post.

Patient outcomes

Length of stay

8.66 Currently the Trust has difficulty providing a seven day a week therapy service within hospital for emergency orthopaedic patients. This delays recovery and return home. This is in part due to difficulties in recruitment of nationally scarce resources and the economics of providing this service to two units.

8.67 The drive to improve length of stay and ensure care closer to home following elective and emergency orthopaedic surgery continues through the outreach and assisted discharge schemes. ESHT is a national leader in length of stay for elective joint replacements and it is unlikely significant improvements can be made although action can be taken to continue to minimise variation and ensure support for early discharge is provided seven days a week. However, further improvements can be made in the length of stay of emergency patients

8.68 The table (Table 25: Average length of stay) below shows the current lengths of stay and the reductions that could be delivered if services are provided consistently and enhanced in line with the model of care

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[5]Royal College of Surgeons, Emergency Surgery: Standards for unscheduled surgical careFeb 2011
[6] **NICE/NCGS – Management of hip fractures in adults 2011**

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Length of stay - elective	2.44	2.62	2.27	2.16	2.05	1.95
Length of stay - emergency	9.86	9.66	8.54	8.37	8.20	8.03

Table 25. Average length of stay

8.69 The implementation of trauma assisted discharge teams at the EDGH has been successful in reducing length of stay for those patients. There is a plan to implement trauma assisted discharge teams at the Conquest Hospital during 2012/13. At Conquest there are no social workers currently attached to the wards, whilst at EDGH there are ward based social workers. This provision enables swifter assessments and improvements in discharge.

8.70 For emergency orthopaedic patients following the TADS pathway the length of stay is 8.6 days, the length of stay has reduced considerably since the implementation of the trauma assisted discharge team service, as an example the length of stay for fractured neck of femur is shown below. The experience of delivering this service to date suggests that further improvements on length of stay would be delivered if the service was provided to all patients who could benefit from it.

	Dec '09 to Nov '10 (before TADS)	**Dec '10 to Nov '11 (with TADS)**	**Reduction in LOS**
Average length of stay	21.67 days	16.87 days	4.78 days

Table 26. Length of stay for fractured neck of femur

Infection Control

8.71 The Health Protection Agency collects mandatory data on surgical site infections in knee replacements and hip prosthetic surgery. ESHT's surgical infection rates were above national average however robust infection control measures have been successful in reducing this to national benchmark levels. These measures have included cancelling elective patients. However, mixing orthopaedic and medical patients, or emergency and elective surgical patients, increases the risk of patients acquiring surgical site and other healthcare acquired infections.

Patient Experience

8.72 As highlighted during stakeholder engagement, delays in emergency surgery, short notice cancellations or late running of clinics, impact negatively on the patient's experience. Admitting both medical and surgical patients onto a surgical ward can have a negative impact on patient experience.

8.73 There are difficulties in maintaining elective activity and ensuring that orthopaedic beds are available for patients receiving orthopaedic care and this results in challenges to achieving the 18 weeks referral to treatment target. Contributing factors are:

- the high levels of demand for emergency care for medical patients which means orthopaedic elective beds are utilised to provide care for these patients
- the high levels of demand for emergency orthopaedic patient which means elective orthopaedic beds are utilised to provide care for these patients

8.74 In 2011/12 there were 296 cancellations of elective orthopaedic surgery on the day due to issues with bed availability.

Sustainability and affordability

Efficiency

8.75 The current model of holding allocated emergency theatre sessions on both sites seven days a week results in both excess/unused capacity. In addition, there are quality and efficiency gains to be made through an increased volume of emergency work, which enables the provision of dedicated theatre and anaesthetics staff with specialist experience in the management of these complex cases, rather than the ad-hoc arrangements that currently exists.

Best practice tariff

8.76 ESHT is not currently achieving the best practice tariff for fractured neck of femur[7]. There are a number of challenges to delivering best practice and the consequent enhanced tariff for these services. These are:

- the need to reduce number of on the day cancellations
- the need to reduce surgical site infections
- the need to reduce length of stay
- the lack of provision of an ortho-geriatric assessment for people over 60 to assess and treat co-morbidities.

8.77 The indicators for best practice tariff are:

- time to surgery within 36 hours from arrival in an emergency department, or time of diagnosis if an inpatient, to the start of anaesthesia
- involvement of an (ortho) geriatrician to include:

  - admitted under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon
  - admitted using an assessment protocol agreed by geriatric medicine, orthopaedic surgery and anaesthesia
  - assessed by a geriatrician (as defined by a consultant, non-consultant career grade (NCCG), or specialist trainee ST3+) in the perioperative period (defined as within 72 hours of admission)
  - post-operative geriatrician-directed multi-professional rehabilitation team and fracture prevention assessments (falls and bone health).

[7] British Geriatrics Society, H Wilson, K Harding, O Sahota, June 2010,

8.78 To qualify for the best practice tariff, all the characteristics listed above must be achieved. The table below (Table 27: Income lost through non-achievement of best practice tariff for Fragility Hip Performance) indicates the number of patients where the best practice tariff was applicable and for whom it was achieved and the associated loss of income for those patients were the best practice tariff was not achieved in 2011/12.

	Numbers	Best Practice Tariff	£s
Patients eligible	671	£ 929	£624k
Patients achieved	157	£ 929	£146k
Income lost	**514**	**£ 929**	**£478k**

Table 27. Income lost through non-achievement of BPT for Fragility Hip Performance

Waiting times

8.79 Significant improvements have been made to address the elective waiting list backlog. However, this has been dependent on the use of third party providers. In 2011/12 a total of 272 day cases and 308 elective patients referred to ESHT had their surgery undertaken by third party providers. The table below shows the use of third party providers has been increasing steadily with a sharp rise since January 2012. This has created an additional financial pressure with £1,809,493 being spent in 2011/12.

8.80 Significant work has taken place in 2011/12 to ensure that the elective waiting list is reduced and to meet the requirement of 18 weeks referral to treatment target. It has only been possible to improve patient waiting times by using third party providers. In 2012/13 it is envisaged that the waiting list of patients requiring treatment will be reduced to a sustainable level. However if current demand continues, this will continue to require the use of third party providers.

Year Month	2011 05	2011 06	2011 07	2011 08	2011 09	2011 10	2012 01	2012 02	2012 03	Grand Total
Day Case	1	19	22	25	5	1	27	76	96	272
Elective	2	24	43	57	16	5	9	60	92	308
Total	3	43	65	82	21	6	36	136	188	580

(NB: there was no such activity in April 2011).

Table 28: Orthopaedic Surgery Apr 2011 - Mar 2012 by 3rd Party Provider

Impact of diagnostic waiting times

8.81 Currently the waiting time can be six weeks or longer for MRI; this can significantly impact on the ability to achieve the 18 week referral to treatment target. Urgent patients assessed in the emergency department also require diagnostic imaging. The radiology service already has plans in place to improve waiting times and has made significant progress to date.

Options for delivering the model of care

8.82 The following options were put forward by the MSK/orthopaedics workstream as having the potential to deliver the model of care. This workgroup was multi-agency and comprised clinical staff, GPs, commissioners, LINk and other representatives of patients and carers.

8.83 The options relate to the configuration of services on the two acute hospital sites EDGH and Conquest. Outpatient and day case service provided in community hospitals would not change.

OPTION 1	OPTION 2	OPTION 3
No change to the current configuration of service with improvements delivered through productivity and efficiency initiatives	**All emergency and all elective inpatient surgery/care provided on one acute site.** **Daycase surgery provided on both acute sites**	**All emergency and all higher risk elective inpatient surgery/care provided on one acute site only** **Lower risk inpatient surgery/care and day case surgery provided on both acute sites**
Option 4	Option 5	Option 6
All elective surgery provided on one acute site only All emergency care provided on both acute sites	All out of hours emergency services provided on one site only with the location of that site alternating between the two acute sites either week on week off or day on day off All in hours emergency care provided on both acute sites. All elective care provided on both acute sites	All out of hours emergency services provided on one acute site only All in hours emergency care provided on both acute sites All elective care provided on both acute sites

Table 29. Delivery options: MSK / Orthopaedics

Initial options appraisal

8.84 Six options were considered in detail for the future configuration of MSK/ Orthopaedic services. Of these three (options 4, 5 and 6) were eliminated at an early stage on the grounds that they would not be viable options for delivering the model of care.

8.85 The primary driver for the removal of option 4 was the impact on patients with large numbers of patients being required to travel from one site to the other. It was considered that this impact would not be offset by an improvement in efficiency

because full on call rotas and emergency theatre provision would be required on both sites.

8.86 The primary driver for the removal of options 5 and 6 was patient safety with concerns raised by clinicians and SECAmb that there was a high risk that patients would arrive at the wrong site at the wrong time due to the difficulties of managing patients safely at the point of transition between in hours and out of hours and the difficulty of communicating clearly with the public about the service provision. In addition it was considered that these options would be inefficient to operate.

Options for Consultation

8.87 The three remaining options (options 1, 2 and 3) are being put forward for consultation. All three include the need to undertake service redesign to contribute to the delivery of the model of care.

8.88 All three options would make no change from the current provision of outpatient clinics or day case surgery.

Option 1:

No change to the current configuration of service with improvements delivered through productivity and efficiency initiatives	
Outline Options Appraisal	
Access and Choice	Access to services would remain as it is currently. Continued requirement to use third party providers which may have an impact on access and choice.
Quality and Safety	Delivering quality improvements and achieving service standards would continue to be challenging. Patients would continue to be treated in non-specialist areas and medical patients may be placed on orthopaedic wards due to variability in activity levels
Clinical sustainability	The would be an on-going requirement to deliver substantial savings through productivity programmes Delivering improvements in specialist provision such as TADs would require investment over and above current provision Unlikely to change the attractiveness of the ortho-geriatrician role currently unfilled
Financial Sustainability	Delivery of the model of care would require investment to improve quality The service would continue to incur considerable unnecessary expense through extensive use of third party providers. Achievement of Best Practice tariffs would continue to be challenging. Having a duplicate workforce working to best practice standards on both sites and operating two rotas would continue to be challenging from a financial perspective
Deliverability	Providing 24/7 medical and nursing teams of appropriate seniority and experience across both sites would continue to be challenging in terms of both finances and recruitment and retention. Recruiting and retaining orthopaedic specialty inpatient nurses and therapists would continue to be an issue particularly in the Hastings (Conquest) area.

Option 2:

<table>
<tr><td colspan="2">All emergency and all elective inpatient surgery/care provided on one acute site.

Day case surgery provided on both acute sites</td></tr>
<tr><td colspan="2">Site A
All elective and emergency orthopaedic surgery would be provided by co-locating these services on a single site (Site A).
Site A would be the Designated Trauma Unit
Elective day case procedures and outpatients would be carried out on site A
Site B
Elective day case procedures and outpatients would be carried out on site B
No emergency admissions or inpatient elective surgery would be undertaken on Site B
Site B would not be a Designated Trauma Unit</td></tr>
<tr><td colspan="2">Outline Options Appraisal</td></tr>
<tr><td>Access and Choice</td><td>Patients booked for elective procedures would know where the procedure was to be undertaken and could plan accordingly.
More certainty for patients would lead to fewer cancellations and lengths of stay would be shorter as it would be easier for patients to plan their episode of care in advance.
Emergency orthopaedic patients would usually be taken by ambulance to the site set up to provide emergency care and this would result in some longer journeys than are currently experienced.
All patients having inpatient surgery would need to travel to site A so more patients would travel compared to option 3
Does not provide a choice of site for inpatient surgery
Investment would be made in providing an equitable Trauma Assisted Discharge Service across the geographical area and this would also help reduce length of stay and ensure that patients were provided with more care in their own homes.</td></tr>
<tr><td>Quality and Safety</td><td>Assessment, stabilisation and transfer would be required for the elective site (site B) for patients that attend the emergency department and require emergency orthopaedic assessment
Better able to ensure that evidence based protocols are followed thus quality would be improved.
Evidence has found that length of stay reduces as quality of care improves
Complication rates would be reduced and infection rates improved by having a single site with protected beds and effective clinical governance in place.
This option would make the more efficient and effective use of specialist staff and resources and provide the greatest opportunity to improve the quality of care across a range of indicators.
Bringing together all unscheduled care in one site would help to smooth the daily variations in demand, enabling better management of beds.</td></tr>
<tr><td>Clinical sustainability</td><td>Co-locating staff groups would allow for greater flexibility to meet activity fluctuations and staffing cover
A single larger team would be better able to attract trainees.
After the planned reductions in demand for elective care have been implemented, the centralisation of elective inpatient care on a single site would enable a single ward of sufficient size to deliver cost effective specialised nursing care, making best use of the scarce resource of trained orthopaedic nurses.</td></tr>
</table>

Financial Sustainability	Cost reductions would be delivered through reduced staffing requirements and the opportunity to ensure that all demand is met by the Trust rather than through third party providers There could be some loss of activity and income if patients choose to go to other (nearer) providers for services. This could equate to 5% of elective and emergency orthopaedic activity The impact of this is likely to be greater than in option 3
Deliverability	More initial start-up capital expenditure may be required compared to option 3 as all inpatient provision will be moved to one site. Theatre capacity would also need to be assessed as will the impact on ITU and diagnostics. This impact would be greater than option 3 Access to early diagnostics, anaesthetics, High Dependency Unit, ITU and emergency theatres could be streamlined but volumes would be larger than option 3. Consultants would be trust based and would still work across the community hospitals to undertake day surgery as is current practice.

Option 3:

All emergency and all higher risk elective inpatient surgery/care provided on one acute site only (Site A). Lower risk inpatient surgery/care and day case surgery provided on both acute sites	
Emergency / Higher risk site (Site A) All higher risk elective surgery would be carried out on site A Site A would provide all emergency musculoskeletal/orthopaedic care. Elective day case and lower risk inpatient procedures would be carried out on Site A Site A would be a Designated Trauma Unit Elective/lower risk site (with overnight stays) (Site B) Day case and elective lower risk inpatient procedures would be carried out on site B No emergency admissions or higher risk elective surgery would be undertaken on Site B Site B would not be a Designated Trauma Unit	
Access and Choice	Retains access to outpatient clinics and day case surgery as currently including on community/local sites. Fewer patients having inpatient surgery would need to travel compared to option 2 Provides choice between sites for day case and lower risk procedures Patients booked for elective procedures would know where the procedure was to be undertaken and could plan accordingly. More certainty for patients would lead to fewer cancellations and lengths of stay would be shorter as it would be easier for patients to plan their episode of care in advance Emergency surgical patients would usually be taken by ambulance to the site set up to provide emergency care and this would result in some longer ambulance journeys than are currently experienced.
Quality and Safety	Separate emergency and elective teams would enable consultant leadership of emergency care Assisted discharge programmes for elective and emergency patients could be delivered better as concentrating the majority of specialist skills and substantive teams to support higher risk and emergency patients. . Discharge processes would be developed from both sites to ensure timely safe discharge.

	Assessment, stabilisation and transfer will be required for the elective site (site B) for patients that attend the emergency department and require emergency orthopaedic assessment. This option would make the more efficient and effective use of specialist staff and resources and provide the greatest opportunity to improve the quality of care across a range of indicators. Bringing together all unscheduled care in one site would help to smooth the daily variations in demand, enabling better management of beds.
Clinical sustainability	Surgeons would rotate between the sites and would work with both elective and emergency patients allowing maintenance of skills. Surgeons would rotate into community and to Site B to provide day case surgery in dedicated centres Co-locating staff groups would allow for greater flexibility to meet activity fluctuations and staffing cover
Financial Sustainability	An increase in the proportion of minimally invasive surgery (laparoscopic) would drive down length of stay and release resources The reduction in cancellations and outsourcing of work to third party providers would reduce current costs. Costs of provision of out of hours theatres would be reduced There could be some loss of activity and income if patients choose to go to other (nearer) providers for services
Deliverability	Initial start up capital expenditure may be required as there are insufficient beds on a single site for this model . Theatre capacity would also need to be assessed as will the impact on ITU and diagnostics. In addition, there may be support via telemedicine required to support cross site decision making. . Consultants would be trust based and would still work across the community hospitals to undertake day surgery as is current practice. All middle grades would need to spend time on higher risk/emergency site as part of their training Training would be improved as trainees would experience working with consultants that are freed up to work with the higher risk patients and teach.

Preferred future configuration

8.89 The future model of care has been developed through a clinically-led review to establish the optimum model of care that aligns with the strategic vision of the trust as set out in the clinical strategy and to the stated strategic commissioning intentions. It also responds to current services challenges and the drive to improve the quality of service provision to the East Sussex population.

8.90 The preferred configuration for delivering this model is option 3 as it allows the development of a sustainable, high quality, efficient emergency service without significant numbers of patients but minimises the number of patients who would have to travel further for their care. It has been identified through clinical review, that if emergency general surgery and emergency orthopaedics are to be single sited they should be co-located to provide support for a Trauma Unit.

8.91 This option enables the protection of orthopaedic beds and would help to reduce the number of operations cancelled by the Trust. This would enable the Trust to achieve best practice tariffs and 18 week referral to treatment target.

8.92 Additionally, cohorting emergency and higher risk patients would enable clinical staff to gain a depth of experience in the treatment of these challenging conditions. These measures would improve quality, patient experience and overall length of stay.

Older patients

8.93 Care for older patients would be improved through the rapid assessment, diagnosis and treatment from a consultant led service and the early involvement of physician with an interest in ortho-geriatrics. This senior physician would be available for assessment of older patients and to improve the treatment and outcomes of patients with co-morbidities. This service can be more efficiently provided with this option that cohorts emergency patients who are more likely to have increased and complex needs.

Service change summary

8.94 The musculoskeletal/orthopaedic services **not changed** under the preferred options are:

Lower risk/simple emergency orthopaedic cases – simple fractures not requiring admission or a surgical procedure will continue to managed as they are now with diagnosis and treatment provided in both of the emergency departments followed by referral to fracture clinic

Fracture clinic – fracture clinics would continue to be provided on both acute sites as they are now

Outpatients – all current outpatient clinics including those provided in community hospitals would continue to be provided as they are now.

Day case surgery – patients admitted for planned surgical procedures where they are not expected to require an overnight stay would continue to be treated in the current day case surgery provision on both the acute hospital sites and in community hospitals as they are now.

Planned lower risk procedures requiring inpatient stays – patients having procedures considered to be lower risk and unlikely to require the patient to return to theatre would be undertaken on both acute hospital sites as now.

Diagnostic and support services –On community sites diagnostic and support services would also continue to be fully aligned to the needs of the musculoskeletal/orthopaedic services

ITU, HDU and recovery areas in theatre would continue to be provided on every acute site

8.95 The musculoskeletal/orthopaedic services that **would change** under the preferred configuration are:

Emergency musculoskeletal/orthopaedic assessments, **admissions and procedures** – inpatient beds and theatre lists for patients requiring emergency orthopaedic care would be provided on one site only

8.96 This would be delivered by:

Day case surgery: A decision on whether a patient would have a day case procedure would depend on both the nature of the procedure and the health of the patient. As currently all patients would be assessed in advance of their admission for surgery in pre-operative assessment clinics; this would reduce the risk of a patient needing an unplanned inpatient treatment as a result of the procedure. Technological advances mean that the type and number of procedures that can be undertaken as day cases is increasing. The Trust has plans in place to increase the percentage of day case procedures it undertakes in line with national benchmarks although achieving upper decile performance represents a challenge given the age of the local population

Dedicated consultant led emergency orthopaedic lists – for all patients requiring surgical treatment following a traumatic injury for example more complex fractures

Emergency assessment of all potential emergency orthopaedic patients would be undertaken by GPs and SECAmb according to a clinical protocol allowing those meeting the criteria to be taken straight to the site providing orthopaedic emergency care. Any orthopaedic emergencies self-presenting at the emergency departments would also be assessed according to the protocol and if necessary transferred to the site providing emergency orthopaedic care to ensure early senior medical review and treatment. This would mean that some patients would require transfer from the emergency department on one site to the other.

Theatre provision for patients requiring emergency orthopaedic treatment – patients requiring treatment for fractures that do not require immediate surgery or admission but do need an urgent operative procedure would be treated on the emergency site only. These patients may go home following initial non operative treatment prior to admission for surgery as they do now.

Trauma Assisted Discharge Service would be enhanced and would support the rehabilitation needs of patients undergoing emergency surgery. This would link with expert senior medical care for complex cases and ortho-geriatric provision would be provided for these patients. This service would be initiated from the site providing emergency care

Planned higher risk orthopaedic procedures requiring inpatient stays – provision for surgery and inpatient stay for patients having procedures considered to be higher risk would be on one site only

Early Assisted Discharge – service would be provided on both sites to support the timely discharge of patients

Designated Trauma Unit - the site taking emergency orthopaedic surgery admissions would also be the site taking emergency general surgery admissions and would become the designated Trauma Unit within East Sussex,

Impact of the preferred configuration

8.97 The impact that the implementation of the preferred model of care has on activity for general surgery takes into account the strategic commissioning intentions which equate to a reduction in both emergency inpatients of 10 % and a reduction in outpatient activity of 24%.

8.98 Based on these levels of activity the number of beds required is set out in the table below. The inpatient bed requirements are based on the activity changes set out above, length of stay and optimal bed occupancy rates. The provision of 60 emergency beds includes 20 beds for assessment and immediate treatment of emergency patients and a further 40 for those patients that require a longer period of acute inpatient care.

8.99 For emergency care projected bed occupancy of 85%.has been used and for elective an occupancy of 90%. Changes in length of stay will be achieved by the improving the trauma assisted discharge service and assisted discharge services and ensuring that they are available to all patients who will benefit from it. The proposed future orthopaedic bed allocation numbers proposed have been tested by the clinical unit to ensure that they would provide sufficient flexibility in bed numbers to manage peak flows

8.100 Future theatre capacity has also been modelled to ensure that there is emergency theatre availability seven days a week, supported by the appropriate consultant and medical staff, as well the appropriately skilled theatre workforce. An extended working day will ensure improved utilisation of the theatres seven days a week. The

requirements for orthopaedics have been planned in along side the overall requirements of all surgical specialties.

Workforce Impact

8.101 Analysis of the workforce impact of the preferred option has also been completed in line with the activity changes.

8.102 If the commissioning intentions and the MSK triage service are successful then there will be an impact in the requirement for all elective orthopaedic activity and in the long term a reduction of emergency orthopaedic surgical procedures. The capacity of the orthopaedic department will need to reduce in parallel. It is anticipated that combining on call rotas and reductions in the numbers of contracted planned activities per consultant, would contribute to this reduction.

8.103 When considering the number of consultants required to support the proposed configuration it is essential to ensure they can support the middle grade and junior doctor requirements. This is reflected in the need to provide services out of hours in combination with other specialties on site, as well as supporting outpatient and elective and day case work. The specialty would need to ensure that appropriate support is in place for any site designated as a Trauma Unit.

8.104 Nurse staffing levels are also based on activity and allow for 1.12 WTE nurses (registered and unregistered) to each bed. This also allows the provision of one registered nurse for six patients based on an average occupancy of 85% as per RCN guidance[8]. The ratio of registered to unregistered staff increases significantly to 80:20 for the 20 beds for assessment and immediate treatment of emergency patients to 70:30 for all other emergency and elective acute beds.

[8] RCN Guidance on Safe Nursing Staff Levels, December 2010

Capacity	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Outpatient FA* clinics per week	35	27	25	26	27	27
Outpatient FU** clinics per week	55	44	41	42	42	43
Theatre sessions per week - elective	36	36	33	34	34	35
Theatre sessions per week - trauma	17	17	15	15	15	15
Length of stay - elective	2.44	2.62	2.27	2.16	2.05	1.95
Length of stay - emergency	9.86	9.66	8.54	8.37	8.20	8.03
Beds - trauma	57	57	60	60	60	60
Beds - elective	43	43	19	18	18	17
Average trauma bed occupancy	119%	108%	85%	85%	85%	85%
Average elective bed occupancy	43%	45%	90%	90%	90%	90%

* FA = First attendance ** FU= Follow up

Table 30. Resource Impact - Orthopaedics

Workforce	
Consultants	18.00
Ortho-geriatrician	2.00
Middle grade	18.00
Junior	16.00
Registered nurses - elective	15.90
Unregistered nurses - emergency	6.38
Registered nurses - elective	50.28
Unregistered nurses - elective	17.92
TADs team	8.00
Outpatient nursing	13.19
Non clinical staff	22.45
Other clinical staff	10.63
TOTAL WTE	**198.75**

Table 31. Future workforce requirements

Financial Impact

Financial analysis £000's	2012/13	2013/14	2014/15	2015/16	2016/17
Direct pay costs	-£11,506	-£10,834	-£10,124	-£10124	-£10,086
Drugs	-£74	-£67	-£61	-£62	-£63
Other Non Pay	-£1,388	-£799	-£213	-£216	-£219
Supplies	-£1,776	-£1,571	-£1,392	-£1,418	-£1,444
Other Services	-£485	-£462	-£441	-£443	-£445
Pathology	-£69	-£67	-£65	-£65	-£66
Pharmacy	-£638	-£622	-£609	-£612	-£615
Radiology	-£418	-£383	-£350	-£351	-£353
*Theatres & ITU Pay	-£6,082	-£5,716	-£5,437	-£5,526	-£5,616
*Theatres & ITU Non Pay	-£6,887	-£6,787	-£6,763	-£6,841	-£6,919
Therapies	-£1,527	-£1,466	-£1,412	-£1,418	-£1,425
Commercial	-£2,880	-£2,736	-£2,599	-£2,469	-£2,346
Corporate Overheads	-£3,491	-£3,351	-£3,217	-£3,088	-£2,965
Total costs	**-£37,220**	**-£34,861**	**-£32,682**	**-£32,633**	**-£32,561**
Cost Savings	**£2,479**	**£2,360**	**£2,179**	**£49**	**£72**

Table 32. Financial Impact - Orthopaedics

Appendix 6: Expected benefits tables

MSK / Orthopaedics: expected benefits as a result of the case for change

Improving patient experience

Expected outcome / benefit	Measures
Improved patient experience and health outcome	• Improved patient experience feedback •
Reduced length of stay for elective and emergency	• Length of stay elective • Length of stay emergency • Excess bed days
Reduced surgical variation in elective and emergency procedures	• Length of stay elective • Length of stay emergency
Reduction in the number of cancellations – brought about by having dedicated protected orthopaedic beds	• Number of cancellations on the day for lack of bed • Number of medical outliers on elective wards
Patient reported outcome measure (PROM - IH 23)	• Percentage of patients reporting an improvement following hip replacement
Patient reported outcome PROM - IH 24)	• Percentage of patients reporting an improvement following knee replacement

Improving patient outcomes

Expected outcome / benefit	Measures
Improved patient health outcome	• Reduction in emergency readmission rates • Increased number of patients with planned discharge date set on admission • Percentage of ortho-geriatrician assessments undertaken for people over 60 years

Reduced surgical site infections (SC04)	• Surgical site infection rates (national surveillance audit data)
	  • Hip prosthetic surgery
	  • Knee replacement

Wider availability of ortho-geriatrician to enhance care	• Percentage of people over 60 years old assessed by ortho-geriatrician and associated achievement of best practice tariff • Use of multidisciplinary assessment protocol (agreed by geriatric medicine, Orthopaedic surgery, and anaesthesia)

Quality and safety

Expected outcome / benefit	Measures

Reduced waiting times for treatment	• Length of time on waiting list for elective procedures
	• Achievement of 18w RTT
	  • 90% for admitted
	  • 95% for non admitted

Reduced waiting times for treatment	• Percentage of patients with fractured neck of femur operated within 48 hours of admission
Improved day case rates to national benchmarks (82%)	• Overall day case rates • Rates of specific procedures undertaken as day case

Delivering sustainable services

Expected outcome / benefit	Measures
Achievement of best practice tariffs	• Time to surgery • Achievement of best practice tariffs for fragility of hip performance • Achievement of best practice tariffs for involvement of ortho-geriatrician
Improved efficiency and productivity of services	• Referral to diagnostics times (within 6 weeks) for MRI

Reduced reliance on third party providers	• Number of times third party providers are used • Cost of use of third party providers
Reduced acute activity in line with GP commissioning intentions and enhanced community pathways	• Impact of MSK triage system on Orthopaedics measured through comparison of activity levels with previous years • Reduction in number of emergency admissions • Reduction in arthroscopy activity

East Sussex Healthcare Trust (ESHT) Clinical Strategy Equality Impact Assessment (EIA)

Section 1 – About the strategy / service / policy / function

1.1 **Name of the policy / strategy / service / function**	ESHT 'Shaping our Future' Clinical Strategy: specific proposals that require reconfiguration
1.2 **Name and position of person(s) completing this assessment**	Jessica Britton, Head of Governance and Assurance (NHS Sussex) and Deputy Director of Engagement and Assurance (East Sussex Downs and Weald (ESDW) & Hastings and Rother (H&R) PCTs). NB: NHS Sussex is a cluster PCT that incorporates ESDW PCT, H&R PCT, West Sussex PCT and Brighton & Hove City PCT. Jilly Alexander, Strategic Development Programme Manager (ESHT)
1.3 **Brief description of the aims of the strategy / policy / service** (include details of who is affected by, involved in and/or benefits from it)	The aim of the strategy is to ensure that East Sussex Healthcare NHS the Trust is in a position to be able to respond to commissioning plans and provide high quality services that continuously improve patients' health outcomes thereby becoming the healthcare provider of choice for its local population. The Clinical Strategy sets out how the Trust will develop clinically-led services that reflect the needs of patients and take account of the rapid development of clinical practice. The Trust's strategy is its response to the requirement to change the way services are delivered in line with commissioning intentions and to ensure it is able to operate services that are clinically and financially sustainable.

In order to deliver the clinical strategy and fully realise the benefits of improved clinical quality and patient experience, ESHT will be implementing plans that will be delivered through a combination of improving the quality, productivity and effectiveness of existing services; the redesign of services and in, some cases, the reconfiguration of services. It is those services that have been identified as requiring reconfiguration in order to provide excellent, high quality services that are the subject of this proposal for change.

The service areas where the need for substantial change for some aspects of those specialties has been identified agreed as:

- General surgery services (emergency and higher risk surgery only)
- Musculoskeletal and orthopaedic services (emergency and higher risk surgery only)
- Stroke services

The implementation of these proposals will have significant beneficial impact on all users of these services in terms of quality of care provided and improved clinical outcomes. Accessing these services may impact differentially on some services users and their relatives and carers.

1.4 **Which department owns the strategy / policy / service?**	**Is responsibility for implementation of this policy/ strategy/ service / function shared with another agency?** Yes ✓ **If *yes* describe their involvement in this process.** (If a partner has conducted Equality Analysis please attach this information.) This analysis has been jointly undertaken by NHS Sussex and ESHT. This is because the programme governance includes all statutory bodies (ESHT, ESDW PCT, H&R PCT) and the process for developing the options has been run in partnership. Each statutory body is cognisant of its commitment to meet its own statutory duties and it is for this reason that this EIA incorporates factors that inform the commissioning of services as well as those that will inform their delivery. Individual EIAs have been undertaken by ESHT on each of the service areas included in this proposal and are referenced within this analysis. Similarly, information relating to the individual PCTs has been used to inform this analysis. Mitigating actions included in the forward plan have been ascribed individually to the relevant statutory body.
1.5 **Does the policy/ strategy/ service have direct consequences or implications for service users and/or staff?**	Yes ✓ If ***no*** then it is not relevant to the Equality duties. Please complete the quality assurance statement in section 3 and send the completed form for quality checking. If **yes** please complete section 2

Section 2 – Equality impacts

2.1 **How have you made sure that the views of stakeholder, including people likely to face exclusion have been influential in the development of the strategy / policy / service:**

The views of stakeholders have shaped the strategy throughout the process. A report on the pre-consultation engagement programme, led by ESHT, is available on request. Engagement has taken place with clinicians, staff, partners and public representatives. Further targeted engagement with protected characteristic groups and their representatives will be undertaken as part of the formal consultation process to explore some of the issues identified through this initial impact analysis. Engagement activities to date include:

External:		Partners:		Internal:
• **Stakeholder workshops** • **Focus groups** x3 with patients and public representatives on the decision making criteria and what good services look like • **Voluntary organisations** Q&A session		• **Care Quality Commission reports** • **Multi agency** clinical workshops • **Joint working groups –** PAP work groups • **GP practice groups**		• **Staff briefings** • **The Board –** regular Board updates • **Staff side** • **Equality & Human Rights staff**

• **Carer's workshops** x2 • **LINks** representation on programme board and each PAP work group, plus attendance at stakeholder workshop • **HOSC** task group set up to have regular oversight of how the strategy has developed and to scrutinise the engagement process related to it • **On line forums** • **Local media** • **Published research into minority needs**		• **Local / County Council** • **Workforce Profiles**		• **Clinical Commissioning Group board meetings and seminars** • **CCG / GP newsletters** • **Briefing letter to all GP practices** • **Seminar for all GP practices**

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<td>2.2 Is the intention of this strategy / policy / service to have a positive impact on any particular protected characteristic group:</td>
<td>Please tick all that apply (for example dementia services will have a positive impact on older people so tick the ‘age’ box)

Age ☒ Religion/belief ☒ Pregnancy / maternity ☒
Race ☒ Sexual orientation ☒ Gender Reassignment ☒
Disability ☒ Sex ☒

Detailed Equality Impact Assessments have been completed for the three services going out to consultation: general surgery, MSK/orthopaedics, stroke and these are available on request from ESHT.

Stroke Model of Care– positive impact on older people: Circulatory disease, including CHD and stroke is the commonest cause of death in those aged 65 years and over in East Sussex. Patients will benefit from prompt assessment and diagnosis of stroke and timely treatment. Complete multi-disciplinary assessment with a patient focussed care plan that is fully integrated with all partner agencies, will ensure optimum outcome for each individual.

General Surgery Model of Care – positive impact on genders: Some cancers are gender specific (such as prostate cancer, cervical cancer) other cancers affect one gender more than the other, because of hormonal factors, lifestyle factors or occupational risk factors. Elective patients will receive a planned approach to all care in an appropriate time frame to meet and or exceed the national key performance indicators for waiting times. Patients to be cared for in an appropriate setting i.e. designated surgical ward or area to enable surgical focussed care and enhanced patient flow, thus reducing length of stay.</td>
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	MSK & Orthopaedic Model of Care – positive impact on age and gender: The prevalence of musculoskeletal conditions generally rises with age. In particular osteoarthritis occurs more frequently in females and also tends to be more severe (particularly beyond age 50) and to involve a greater number of joints. Patients will benefit from a patient centred approach to orthopaedic care delivered in the appropriate setting with minimal delays, right patient, right place, right treatment.
2.3 **Please describe any actions taken in the development of this strategy / policy / service to maximise positive impact**	*The positive impacts on clinical quality and outcomes of the proposed options are described in the pre-consultation business case and the Primary Access Point (PAP) impact assessments and are intended to apply to all patients across all protected characteristic groups.* *A full access audit of both sites to ensure that services are accessible will produce positive impacts for disabled people and all patients and visitors alike. This will have positive impact wider than just the three services that this analysis covers.*
2.4 **Could the policy/ strategy / service have direct or inadvertent negative impact on any particular protected characteristic group:**	Please tick all that apply (for example, a telephone appointments system may negatively impact people deaf people and people with hearing difficulties, people with speech problems and people who do not speak English) **Age** x **Religion/belief** ☐ **Pregnancy / maternity** ☐ **Race** x **Sexual orientation** ☐ **Gender Reassignment** ☐ **Disability** x **Sex** x

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<td>2.5 Please describe any actions taken in the development of this strategy / policy / service to mitigate against any negative impacts</td>
<td>Service users, their families and carers –

The proposal to deliver the services described from a single site each rather than the current model of delivery presents a number of potential negative impacts for patients and their carers and family members.

These can best be summarised as – travel, transport and parking; accessibility; interdependencies and choice; and patient experience. There are differences in the populations for East Sussex Downs and Weald PCT (ESDW) and Hastings and Rother PCT (HR) that mean these potential impacts may affect these populations in different ways.

Population profiles:

The East Sussex JSNA Score cards 2011/12 provide data on over 200 indicators of health and wellbeing for the East Sussex population. The score cards can be accessed at http://www.eastsussexjsna.org.uk/scorecards/nhsview.aspx

The data profiles population and patients within the 2 PCT catchment areas, so data for ESDW includes data for High Weald, Lewes and the Havens. This is significant for two reasons. Patients from this part of the county are more likely to access hospital services in Brighton and Hove and Kent rather than Eastbourne or Hastings, and have comparably better health and lower levels of socio-economic deprivation than the wider East Sussex population. Therefore data for ESDW patients will be impacted upon by the profile of this population, but hospital admissions in the county may not reflect these differences.</td>
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ESDW has a higher proportion of over 65s and over 85s than HR, and the projected population increase for over 85s between 2010 and 2014 in ESDW is almost 3 times that of HR (11% estimated increase is ESDW compared to 4% in HR).

HR scores 26.83 on the Index of Multiple Deprivation whilst the score for ESDW is 16.69. The population of HR are also more likely to be in receipt of incapacity or severe disablement allowance, disability living allowance, out of work benefits and to have a lower median household income. They are less likely to have access to a car and more likely to experience fuel poverty, and a higher proportion of HR residents are currently able to access hospital services via public transport than residents in ESDW.

There is a higher prevalence of learning disabilities and higher proportions of both carers and certain BME populations in HR.

Stroke –

Emergency hospital admissions for stroke, when adjusted for age, are much higher than would be expected for HR, although the actual number of admissions for both areas is very similar. Mortality from stroke and mortality from circulatory disease are all significantly higher for HR than ESDW. Whilst obesity levels are the same for both parts of the county, smoking prevalence is slightly higher for HR.

For patients requiring Hyper-Acute and Acute stroke services transport will be by ambulance. However for carers and families of patients there will be additional travel time and cost for some dependant on the location of the service. Those most likely to experience additional difficulties in travelling include those facing socio-economic deprivation; disability / chronic illness / learning disabilities / sensory impairments; caring responsibilities; age related mobility barriers; those without access to a car; and those for whom English is not their first language. For these groups the additional travel time and travel costs may be prohibitive.

Given the population differences described above, the impact of additional travel time and costs are potentially most significant for residents of HR.

An analysis of travel and transport options and infrastructure will enable a better understanding of this impact and options for mitigation.

MSK and orthopaedics –

Emergency hospital admissions due to fractured femurs are the same for both parts of the county – although significantly lower for patients in the High Weald, Lewes and the Havens area.

Similar travel and transport issues will exist for both patients and carers / family members alike in accessing MSK and Orthopaedic services provided from one single site in East Sussex. Access to public transport and local parking will be key considerations. A significant area of concern will be around whether the additional travel time and costs is prohibitive for patients and results in increased non-attendance and worsening health.

	Appointment times / list times may need to reflect any difficulties in travelling for patients (e.g. single parents travelling on peak time public transport with small children / wheelchair users accessing peak time public transport / time restrictions for those holding bus passes as a result of disability or age). The options retain outpatient services on both sites and this will mitigate against most significant impacts. *Again the impact of increased travel time and costs will possibly be more significant for patients and their families in HR* ***General surgery -*** *Levels of elective hospital admissions are higher for HR. Similar travel and transport issues as previously described will exist for both patients and carers / family members alike.* ***Accessibility:*** *For all 3 services accessibility of the chosen site will be a major potential impact for older people; people with disabilities / learning disabilities / chronic illness / mental health issues / sensory impairments. Full access audits of both sites, external and internal areas, parking, signage, lighting, travel routes to assessment and treatment areas, waiting rooms etc will enable any barriers to be removed and negative impact to be mitigated.*

	Interdependencies and choice: *It is unclear how the location of the 3 services being considered may or may not impact on both the provision of other services and patients' current access and choice around other services.* *The proposal decision to provide services from a single site as opposed to current provision on both Conquest and EDGH sites does reduce patient choice, which may be influenced by a number of factors described in the 'Patient experience' section following. The proposals, do however, offer an improved quality of services and therefore extend the choice of patients regarding quality, if not location.* *There may also be some currently unknown impact on community or voluntary sector support services that are geographically based dependent upon the provision of these acute services e.g. support / rehab / information and advice / day services etc.* ***Patient experience*** *Current patient experience data is not disaggregated into the protected characteristics; therefore it is unclear as to whether patients from protected characteristic groups currently have a poorer experience of these services. In order to mitigate any negative impact for these groups, experience data will need to be collected for protected characteristic communities, a baseline established, and future reporting for comparison with this baseline to address inequalities and evidence mitigation of impact.*

	Experience and knowledge of staff working with support services such as BSL interpreters; language interpreters; LD advocates; carers etc, and their knowledge of other local voluntary sector services to signpost patients for additional support, will all impact on the patient experience. Relocating services will require assurance that all service staff at the chosen location are able to appropriately refer and signpost to additional services, are able to work with interpreters and advocates, and are appropriately skilled in working with the cultural and lifestyle needs of diverse patients and carers. **Staff –** *Relocation of services will inevitably result in relocation of staff, and for some staff extended travel times to and from work and increased costs of travel represent a potential negative impact of this strategy. The full impact will not be known until service delivery plans fully describe the required staffing for these services.* ***Stroke services:*** *Conquest has a higher proportion of staff on lower pay bands and on part time contracts – therefore there are both financial implications for these staff of locating services at EDGH, and possible impact on caring or other responsibilities for part time staff. EDGH has a higher proportion of older and younger staff, BME staff, and staff with undefined disability status – so a move to Conquest would need to mitigate negative impact for these staff groups.*

	MSK / orthopaedics: *Whilst there are similar numbers of staff on both sites at lower pay bands, Conquest has a higher proportion of band 2 staff; part time staff; younger and older staff; and staff for whom their disability status is undefined. Therefore the impact of relocating to EDGH for these staff would require mitigation. EDGH has a higher proportion of BME staff who may therefore be impacted upon by a move to Conquest.* ***General surgery:*** *Staff profiles for each site are similar in terms of full or part time workers and proportions of BME staff. Conquest has higher proportions of staff at band 2; staff over 60; and staff for whom disability status is undefined. Relocating these services to EDGH may therefore have an impact upon these staff groups*
2.6 **How will you monitor that the intended impact(s) have been delivered (i.e. mitigation of negative impacts and delivery of positive impacts)**	*See **Action Plan** in Appendix A for mitigating actions*
2.7 **Is this policy/ strategy / service carried out (partially or completely) by contractors?**	If ***yes*** please submit additional information detailing how the equality duties and diversity implications will be monitored via the procurement process.

Yes ☒ No ☐	*As detailed above, this EIA has been jointly prepared and NHS Sussex (or successor commissioning organisations) will ensure that East Sussex Healthcare NHS Trust is monitored in the delivery of their actions against any agreed plan in line with the contract performance process.*
If you have identified any negative impacts that have not been mitigated against in the development of the strategy / policy / service please develop an action plan for addressing the impacts (template at appendix 1)	

3. Quality Assurance statement:

I have assessed the (insert name of strategy / policy / service) with regard to Equality legislation and duties and am confident that all negative impacts and mitigation actions have been identified and all opportunities of positive impacts for protected characteristic groups have been maximised

Signed **Date: 6 June 2012**

Print Name: Phil Seddon
Job Title: Equality and Diversity Lead, NHS Sussex

Jourdan Durairaj
Head of Equality, Diversity and Human Rights

Appendix A Action Plan

Please identify below any outstanding actions you intend to make in order to mitigate against adverse impacts or safeguard positive impacts, that have been identified in the assessment:				
Impact:	**Action required:**	**How will this be measured?**	**Timescale:**	**Responsible organisation:**
Additional travel time and costs for patients and carers / family members	Full travel and transport audit for both sites examining impact on patients and carers/ family members from protected characteristic groups	Production of report highlighting impact and actions to mitigate; Recommendations inform decision making	24th June	Joint NHS Sussex/ESHT) MBA Consultancy
Barriers to accessing services at either site	Disability access audit of both sites	Production of disability access report and recommendations for required improvements; Recommendations included in options appraisal criteria and decision making process; Monitoring of Trust action plans for delivering required improvements	Mid-August	ESHT

Patient experience impacted upon by single site location	Establish baseline patient experience data across protected characteristic communities (PALs; complaints; patient experience surveys etc); Patient experience data broken down by protected characteristic is annually reported to heads of clinical governance and used to inform business planning	Monitor and report annually to evidence improved patient experience reporting		ESHT
Staff experience and confidence of working with interpreting and advocacy services / community support services / diverse patients and carers	Learning and Development programme for certain clinical staff in additional E&D awareness; cultural competency; accessing communication support services etc.	Staff E&D training monitored through Annual Equality Report		ESHT

Insufficient data on key protected characteristic communities or unknown potential impact for some communities	Targeted engagement and consultation of protected characteristic communities throughout the wider public engagement process to agree preferred option	Monitoring of protected characteristics of participants in all engagement and consultation processes; Analysis of stakeholder feedback by protected characteristics. Monitor and report annually to evidence improved patient and service-user reporting against protected characteristics		NHS Sussex
Potential impact for particular staff groups of increased travel time and costs dependent upon location of services	Engagement with staff in services; staff side; staff representatives to fully explore impact. Result to be included in options appraisal consideration and evidenced in final decision making.			ESHT