NHS

Office of the Trust Special Administrator

Appendix E

Hospital Service Change Proposals

Securing sustainable NHS services

Introduction

1. Recommendations 1 to 4 will enable a significant improvement to the financial position at South London Healthcare NHS Trust. However, implementing them neither bridges the financial gap entirely nor responds to the need to deliver the quality improvements in health services, recommended following a recent review of emergency and maternity care in London. The Trust Special Administrator (TSA) was therefore required to look more broadly at the financial and clinical state of the whole health system of south east London.

2. The development of recommendations for service change is in response to working with clinicians, commissioners, patients and the public and other stakeholders to understand how the quality of service provision in the NHS in south east London could be improved and secured in light of a growing and changing population and within available resources.

3. This work included the development of a strategy by the six Clinical Commissioning Groups (CCGs) in south east London for how care will be delivered in the future, so that the population of south east London receives the best possible care in the community supporting people to live healthier and more independent lives. These aspirations are essentially a set of shared standards of care, which will be delivered locally as determined by each CCG. Details on some of the opportunities to improve the quality of care, outcomes, patient experience and performance on health inequalities are detailed in annex 1.

4. For hospital-based care the TSA's clinical advisory group and external clinical panel both recommended that any future configuration of hospital services in south east London must meet the London-wide clinical quality standards for hospital-based acute emergency and maternity services, which have been agreed in response to the recent London review (appendix P). CCGs have further committed to ensuring all future hospital-based care in south east London is commissioned in line with these standards. The benefits of implementing these are outlined in annex 1.

5. To respond to both the Community Based Care Strategy (appendix O) and the clinical quality standards (appendix P), a number of potential hospital configuration options were developed to secure clinical sustainability. Key clinical and non-clinical stakeholders were then engaged to develop a set of robust criteria to evaluate these configuration options. The clinical advisory group evaluated each option before recommending how hospital-based acute emergency and maternity services should be configured in south east London. These draft recommendations were then subject to a financial value for money assessment.

6. This appendix sets out the approach taken; the configuration options considered; the process for developing and agreeing the criteria to evaluate each option; the process for the application of the criteria; and the outcome of the evaluation.

7. Further to this, the appendix details the development work and engagement that was subsequently undertaken on the recommendations during the consultation period. Consultation responses and the Health and Equalities Impact Assessment are then detailed for each recommendation with detail of the external clinical panel's consideration of this and their recommendation to the TSA.

Approach

Agreeing clinical quality standards

8. A number of reports over many years - including those from the National Confidential Enquiry into Patient Outcome and Death, the Royal College of Physicians and the Royal College of Surgeons - have identified issues relating to the provision of emergency care services. The message from these reports has been consistent, namely that there is often inadequate involvement of senior medical personnel in the assessment and subsequent management of many acutely ill patients. Outcomes are therefore not as good as could be achieved - and not as patients should expect - particularly at the weekend.

9. In 2011, on behalf of commissioners in London, London Health Programmes undertook a review of adult emergency services across the capital. This review demonstrated that patients admitted as an emergency at the weekend have a significantly increased risk of dying compared to those admitted on a weekday. Across London it suggested around 520 lives could be saved every year - within south east London this equates to around 100 lives. Reduced service provision, including fewer consultants working at weekends, was associated with this higher mortality rate. In London, consultant cover at the weekend was found to be half of what it was during the week - the same was found in south east London.

10. Clinical expert and patient panels developed evidence-based minimum clinical quality standards for adult emergency services – acute medicine and emergency general surgery – to address these variations in service arrangements and patient outcomes.

11. This work was expanded in 2012 to cover all hospital-based acute emergency services – adults and paediatric – and maternity services to address the variation found in these services. Clinical quality standards for these services have now been developed (appendix P) and were endorsed by the London Clinical Senate in September 2012 and the London-wide Clinical Commissioning Council in November 2012.

12. The clinical advisory group and external clinical panel considered these clinical quality standards and further endorsed them and advised the TSA that any future models of acute care in south east London should consistently meet these standards to secure long-term clinical sustainability. Clinical commissioners have committed to

ensuring all future hospital based care in south east London is commissioned in line with the clinical quality standards. This was echoed in the commissioners' responses to the consultation, stating the any future configuration of services in south east London would need to meet the London clinical quality standards for emergency and maternity care and supported the need for consolidation of services to achieve this.

Evaluation of the options

13. Considering the impact of delivering the clinical quality standards and Community Based Care Strategy alongside the financial challenges to be addressed, a number of options for the future configuration of services across south east London were put forward for evaluation.

Establishing hurdle criteria

14. An exhaustive list, taking into account every possible combination of service configuration of hospital sites in south east London, created 16,384 permutations to evaluate. To ensure only options that were clinically and financially viable were considered fully; hurdle criteria were agreed and applied to this long list. These hurdle criteria were agreed by the clinical advisory group and the TSA advisory group on 8 August 2012 and were further endorsed by the patient and public advisory group and external clinical panel. The agreed hurdle criteria are shown in figure 1.

Figure 1: Long-list hurdle criteria

Hurdle criteria	High quality care, Realistic time frame, Affordable to commissioners	▪ capable of meeting all applicable standards, ensuring patient safety ▪ deliverable within a 3 year timeframe ▪ affordable to health and social care commissioners

Application of hurdle criteria

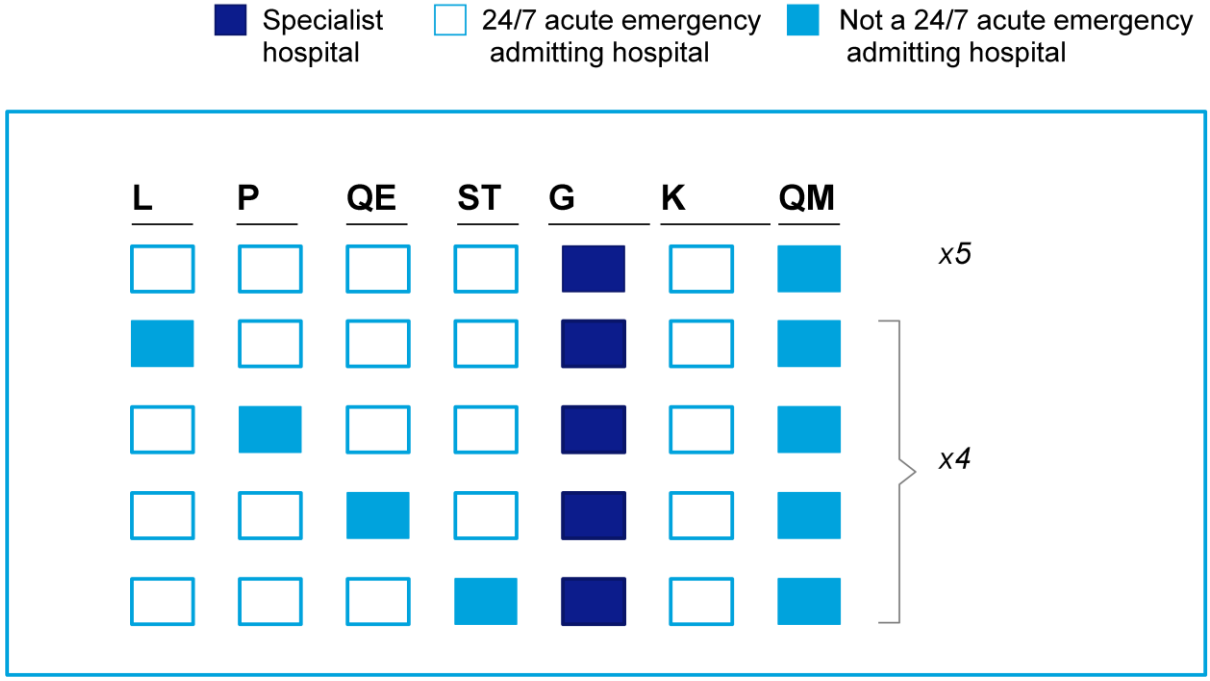
15. Application of the hurdle criteria immediately removed from consideration the vast majority of possible configuration options: solutions that would need the creation of new hospital sites were ruled out on the grounds that they were neither affordable nor deliverable in a realistic time frame; and solutions that would see the reversal of decisions taken recently about the reconfiguration of services that had improved outcomes were also ruled out.

16. In the application of these criteria, a number of "fixed points" were also established by the clinical advisory group. For these sites, the clinical advisory group decided their designation should be "fixed" on the grounds that changes would result in a deterioration of services. These "fixed points" and the rationale for each are as follows:

- *Guy's Hospital*: It was agreed that Guy's Hospital would not be considered for development as a 24/7 acute emergency admitting hospital as it is well established as a specialist and elective centre for a range of standard, complex and specialist services.
- *King's College Hospital*: As one of London's four major trauma centres for seriously injured patients within the trauma networks in London, which are working successfully, it was agreed that this site would not be considered for significant service reconfiguration and should be developed as a 24/7 acute emergency admitting hospital.
- *Queen Mary's Hospital*: It was agreed that this site should not be considered for development as a 24/7 acute emergency admitting hospital as it was felt that re-opening A&E and associated emergency services on the site would be a retrograde step in light of the changes that had recently been made under the *A Picture of Health* programme.

17. With these "fixed points" agreed, a short list of five configuration options were agreed to be evaluated against the full evaluation criteria (figure 2).

Figure 2: Potential configuration options



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

18. The term "fixed point", used by the clinical advisory group, did not mean that the site would be exempt from some changes. It was recognised by the clinical advisory group that all sites would need to change in response to the impact of the Community Based Care strategy and to meet the agreed minimum clinical quality standards for hospital-based acute emergency and maternity services.

Establishing full evaluation criteria

19. The next stage in the process involved defining the full criteria to evaluate the short list of configuration options further. The evaluation criteria were agreed by the clinical advisory group and the TSA advisory group and covered five key areas:

    - Quality of care
    - Access to care
    - Value for money
    - Deliverability
    - Research and education

20. Sub-criteria and indicators on which analysis could be provided to support the evaluation were defined at a number of workshops attended by a wide range of clinicians, clinical commissioners and patients and the public. The indicators chosen were to provide an overview of the criteria that would allow clinical advisory group members to make informed decisions based on their professional judgement and the information presented to them. The list of indicators chosen was not exhaustive, but rather to provide quantitative analysis to support the discussion and decision making of the clinical advisory group.

21. The approach adopted for evaluating the options, including the evaluation criteria, were reviewed in various advisory groups including the clinical advisory group, the patient and public advisory group, the finance, capital and estates advisory group and the TSA advisory group. The approach and the criteria were refined on the basis of feedback. The final set of criteria, sub-criteria and description indicators is shown in figure 3.

Figure 3: Final evaluation criteria, sub-criteria and description indicators

Criteria			Description indicators
1	Quality of care[1]	• Clinical effectiveness • Patient experience and estate quality	• Standardised mortality rates (in and out of hours), time to operatefor FNOF, infection rates, readmission rates, conversion rates of A&E attendance to admission • Consultants on rota (emergency surgery, pediatrics) • Key patient satisfaction scores, complaints, patient safety, medication error rate • Age and quality of the estates
2	Access to care	• Distance and time to access services • Patient Choice • Access to integrated services	• Impact on population weighted average travel (blue light travel, off-peak car, peak car, public transport) • Number of sites delivering emergency, obstetrics, elective, outpatients, diagnostics • Number of Trusts with major hospital sites • Delayed transfers of care in vs out of borough; length of stay >75s, readmission rates trend
3	Value for money	• Capital cost to the system • Transition costs[2] • Fixed cost & operational savings • Net present value • Provider viability	• Up front capital required to implement acute reconfiguration • Non-recurring costs (excluding capital build and receipts) to implement changes • Estimate of fixed cost savings derived from cost rationalisation initiatives • Overall value to the system • Assessment of the on-going viability of the individual sites
4	Deliverability	• Workforce • Expected time to deliver • Co-dependencies with other strategies	• Workforce experience/quality e.g., turnover, sickness, satisfaction • Scale of change (bed movements) • Assess strategies impact e.g., cancer, stroke, King's Health Partners merger
5	Research and Education	• Conducive to education • Conducive to research	• GMC national training survey and staff training survey • Disruption to education and research spend • Qualitative assessment of impact on existing strategies (alignment with GMC training plans)

1. Patient safety is considered before this stage of evaluation in the hurdle criteria for options. All options must meet required patient safety standards
2. Costs of transitioning from the current to the proposed option

Full evaluation of the configuration options

22. Each short list option was then clinically evaluated against the criteria by the clinical advisory group on 26 September 2012. At this stage, the group recommended that St Thomas' Hospital should be developed as a 24/7 acute emergency admitting hospital and should not be considered for the evaluation. This decision was made on the grounds that:

- The Evelina Hospital – a purpose-built children's hospital alongside St Thomas' Hospital – is critical to delivering tertiary paediatric services to the local population (including South London, Kent, Surrey and Sussex). The Evelina Hospital's specialist paediatric services are both interdependent with and share the support infrastructure with general paediatrics and the wider acute hospital services of St Thomas' Hospital.
- It is a receiving centre for high-risk obstetrics services for a wider population, which would be difficult to re-provide elsewhere.

- St Thomas' Hospital is one of the designated complex vascular centres in London making the unit the largest centre by operating volume in Europe. One in three emergency referrals to this service is via the A&E department and loss of this service would cause a significant challenge to the delivery of the arterial model of care. Moreover, it is the only unit in the country that runs an emergency rota for acute aortic surgery.
- St Thomas' Hospital is one of five extracorporeal membrane oxygenation (ECMO) sites in the United Kingdom. As a designated centre for tertiary severe respiratory failure, it provides a critical care service for tertiary cardiology and vascular service for the region. These services would be difficult to re-provide elsewhere.

Application of the full evaluation criteria

23. Using the indicators that were agreed, information on each sub-criteria was considered by the clinical advisory group for the non-financial evaluation of the options. Using this information, members of the clinical advisory group were asked to use their professional judgement and clinical expertise and opinion to reach consensus on a single score for each criteria as a whole.

24. Each option of four 24/7 acute emergency admitting hospitals was scored compared to the option of five 24/7 acute emergency admitting hospitals. This enabled each of the short-listed options to be ranked in terms of impact. The nature of the exercise, evaluating the impact that potential changes to the configuration of health care services in south east London would have on the system in 2015/16, does not lend itself to a precise scoring system. Instead, it was agreed that each potential configuration of services should be rated in terms of whether the clinical advisory group felt it would lead to an improvement or deterioration in that specific category compared to the option to deliver five 24/7 acute emergency admitting hospitals, awarding a "+" or "-" as appropriate.

25. In order to have a process that could distinguish between varying degrees of improvement or deterioration, without creating a system forcing the evaluators to be impossibly specific in their predictions, a second tier of scoring was introduced simply as "++" or "- -" to indicate a significant improvement or deterioration. Using this methodology, the scoring for each criteria is outlined in the following sections.

26. Similarly, the finance, capital and estates working group - formed of the directors of finance and directors of estates from the four trusts and the chief financial officers from the six clinical commissioning groups across south east London - agreed a set of criteria and used it to evaluate each option in term of its value for money.

1: Quality of care

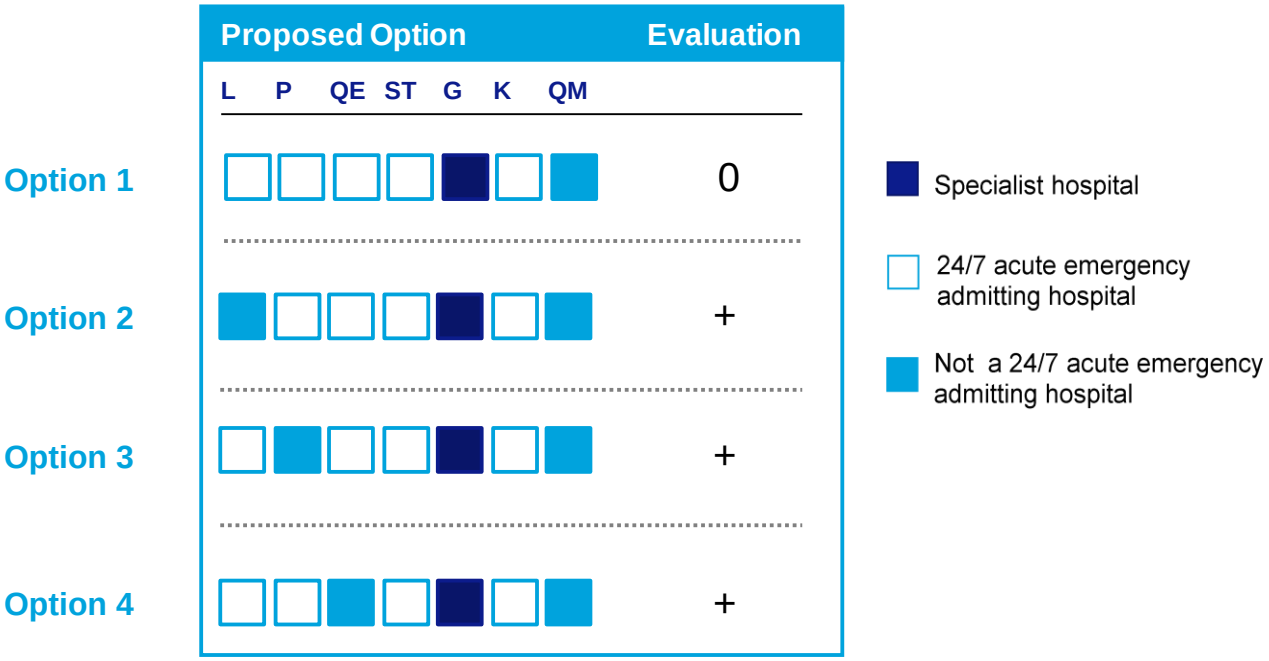
27. To evaluate the impact that each option would have on the quality of care that patients would receive, data on each of the description indicators were considered by the clinical advisory group for the two sub-criteria of clinical effectiveness and patient experience and estate quality.

1A: Clinical effectiveness

28. For clinical effectiveness, the metrics chosen were well recognised national indicators of overall current quality of care.

29. After consideration of the data for each indicator, the clinical advisory group reached a consensus that each of the options to develop four 24/7 acute emergency admitting hospitals were to be rated equally – and more positively than the option to develop five 24/7 acute emergency admitting hospitals.

Figure 4: Evaluation of sub-criterion 1A – Clinical effectiveness



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30. The clinical advisory group noted that it would be difficult to prove empirically that one hospital in its entirety would have a higher overall quality of care than another. The variation by particular service line or dimension of quality was too high. In addition, the group advised that data on current indicators would not indicate the quality of care that would be provided in the future. Potential changes in organisational form, a potential reconfiguration of services and a drive towards higher standards therefore made it difficult to distinguish between options.

31. The clinical advisory group highlighted that quality was of the upmost importance in considering any changes to the way services were delivered and had already advised that any future configuration of services in south east London would need to meet the London-wide clinical quality standards.

32. Hospitals in south east London were audited from July to September 2012 for compliance with the already commissioned acute medicine and emergency general surgery services clinical quality standards. The audit results were not made available to the clinical advisory group at the point of evaluating the service change options, but they do demonstrate the challenges facing hospitals in south east London. With regard to compliance with the quality standards, no hospital met all of the standards as shown in figure 5.

Figure 5: Quality and Safety Programme Audit in south east London, 2012

No	Standard	KCH		SLHT-PRUH		SLHT-QEH		GSTT-ST		UHL	
		Medicine	Surgery	Medicine	Surgery	Medicine	Surgery	Medicine	Surgery	Medicine	Surgery
1	All emergency admissions to be seen and assessed by a relevant consultant within 12 hours of the decision to admit or within 14 hours of the time of arrival at the hospital.	✗	✗	✓	✗	✓	✗	✓	✗	✗	✗
2	A clear multi-disciplinary assessment to be undertaken within 12 hours and a treatment or management plan to be in place within 24 hours (for complex needs patients see 23 and 24).	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
3	a) All patients admitted acutely to be continually assessed using a standardised early warning system (EWS).	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	b) Consultant involvement is required for patients who reach trigger criteria. Consultant involvement for patients considered 'high risk' to be within one hour.	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
4	When on-take, a consultant and their team are to be completely freed from any other clinical duties or elective commitments.	✓	✓	✓	✗	✓	✗	✓	✓	✗	✗
5	In order to meet the demands for consultant delivered care, senior decision making and leadership on the acute medical/ surgical unit to cover extended day working, seven days a week	✗	✗	✓	✗	✓	✗	✓	✗	✗	✗
6	All patients on acute medical and surgical units to be seen and reviewed by a consultant during twice daily ward rounds, including all acutely ill patients directly transferred, or others who deteriorate.	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
7	All hospitals admitting medical and surgical emergencies to have access to all key diagnostic services in a timely manner 24 hours a day, seven days a week to support clinical decision making: • Critical – imaging and reporting within 1 hour; • Urgent – imaging and reporting within 12 hours; • All non-urgent – imaging and reporting within 24 hours.	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗
8	All hospitals admitting medical and surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week: • Critical patients – 1 hour; • Non-critical patients – 12 hours.	✓	✓	✗	✗	✗	✗	✓	✓	✗	✗
9	Rotas to be constructed to maximise continuity of care for all patients in an acute medical and surgical environment. A single consultant is to retain responsibility for a single patient on the acute medical or surgical unit. Subsequent transfer or discharge must be based on clinical need.	✗	✓	✓	✗	✓	✗	✓	✓	✓	✓
10	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialties throughout the emergency pathway.	✓	✓	✗	✗	✗	✗	✓	✓	✗	✗
11	Patients admitted for unscheduled care to be nursed and managed in an acute medical or surgical unit, or critical care environment.	✓	✓	✓	✗	✓	✗	✓	✗	✓	✗
12	All admitted patients to have discharge planning and an estimated discharge date as part of their management plan as soon as possible and no later than 24 hours post-admission. A policy is to be in place to access social services seven days per week. Patients to be discharged to their named GP.	✗	✓	✓	✗	✓	✗	✓	✓	✗	✓

No	Standard	KCH		SLHT-PRUH		SLHT-QEH		GSTT-ST		UHL	
		Medicine	Surgery	Medicine	Surgery	Medicine	Surgery	Medicine	Surgery	Medicine	Surgery
13	All hospitals admitting emergency general surgery patients to have access to a fully staffed emergency theatre immediately available and a consultant on site within 30 minutes at any time of the day or night.		✗		✓		✓		✗		✓
14	All patients admitted as emergencies are discussed with the responsible consultant if immediate surgery is being considered. For each surgical patient, a consultant takes an active decision in delegating responsibility for an emergency surgical procedure to appropriately trained junior or speciality surgeons. This decision is recorded in the notes and available for audit.		✗		✗		✗		✗		✓
15	All patients considered as 'high risk' to have their operation carried out under the direct supervision of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care. High risk is defined as where the risk of mortality is greater than 10%.		✓		✗		✗		✗		✓
16	All patients undergoing emergency surgery to be discussed with consultant anaesthetist. Where the severity assessment score is ASA3 and above, anaesthesia is to be provided by a consultant anaesthetist.		✗		✓		✗		✗		✓
17	a) The majority of emergency general surgery to be done on planned emergency lists on the day that the surgery was originally planned. The date, time and decision maker should be documented clearly in the patient's notes and any delays to emergency surgery and the reasons why recorded.		✓		✗		✓		✗		✓
	b) Any operations that are carried out at night are to meet NCEPOD classifications and be under the direct supervision of a consultant surgeon.		✗		✗		✗		✗		✓
18	All referrals to intensive care to be made from a consultant to a consultant.	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
19	A structured process to be in place for the medical handover of patients twice a day. These arrangements to also be in place for the handover of patients at each change of responsible consultant/medical team. Changes in treatment plans are to be communicated to nursing and therapy staff as soon as possible if they are not involved in the handover discussions.	✗	✓	✓	✗	✓	✓	✓	✓	✗	✓
20	Consultant-led communication and information to be provided to patients.	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
21	Patient experience data is captured, recorded and routinely analysed and acted on. Is a permanent item on board agenda and findings are disseminated.	✗	✓	✗	✗	✗	✗	✓	✓	✗	✓
22	All acute medical and surgical units to have provision for ambulatory emergency care.	✗	✓	✗	✗	✓	✓	✗	✓	✓	✓
23	Prompt screening of all complex needs inpatients to take place by a multi-professional team which has access to pharmacy and therapy services, including physiotherapy and occupational therapy, seven days a week with an overnight rota for respiratory physiotherapy.	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
24	Single call access for mental health referrals to be available 24 hours a day, seven days a week with a maximum response time of 30 minutes.	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓
25	Hospitals admitting emergency patients to have access to comprehensive 24 hour endoscopy services that has a formal consultant rota 24 hours a day, 7 days a week	✓	✓	✗	✗	✗	✗	✓	✓	✗	✗
26	a) All hospitals dealing with complex acute medicine to have onsite access to levels 2 and 3 critical care (i.e. intensive care units with full ventilatory support).	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	b) All acute medical units to have access to a monitored and nursed facility.	✓		✓		✓		✓		✓	
27	Training to be delivered in a supportive environment with appropriate, graded consultant supervision	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓

33. The clinical advisory group and delegates at the acute workshops held on 11 and 24 September 2012 recognised that the challenges in delivering the London-wide standards for hospital-based acute emergency and maternity care would be a significant challenge for providers in south east London as no Trust currently met all of them. To meet these standards, hospitals would need to increase their consultant workforce (figure 6), which would not only present a financial challenge but clinicians also raised concerns about staff maintaining the required skill set with insufficient levels of activity.

Figure 6: Shortfall in consultant workforce in south east London

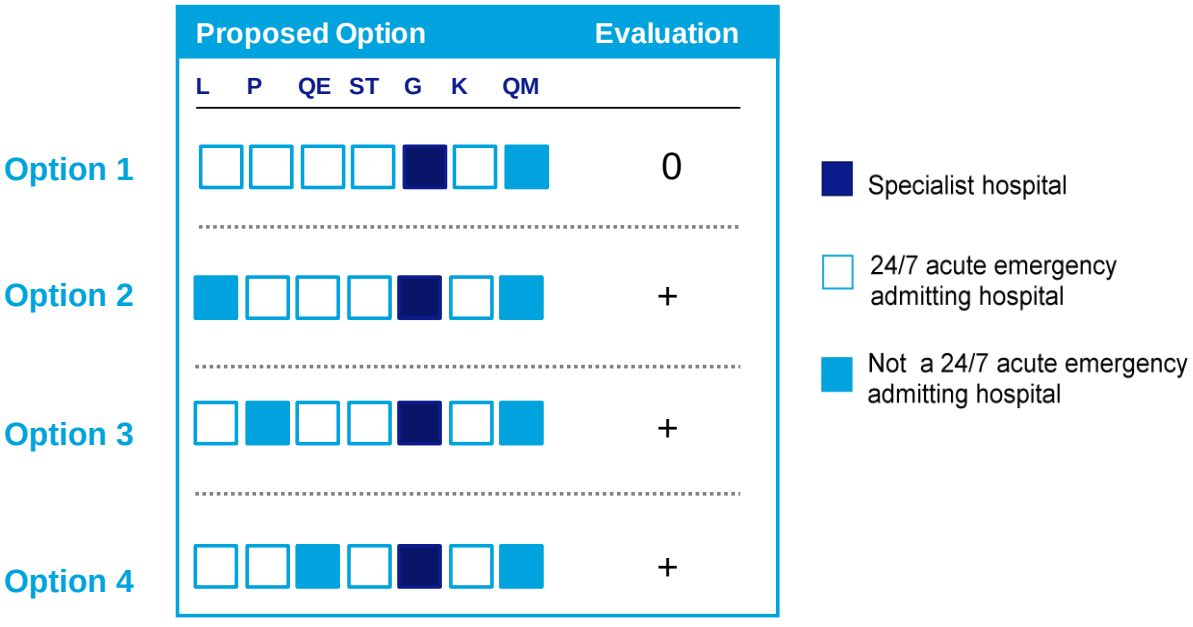
	Recommended consultant workforce	Shortfall in south east London (total)
Emergency general surgery	10 per site	8 consultants
Emergency medicine	12 per site	21 consultants
Paediatrics	10 per site	9 consultants
Obstetrics	21 per site	41 consultants

1B: Patient experience and estate quality

34. Indicators used to measure patient experience and estate quality were selected by the clinical advisory group as metrics regarded as the most meaningful and representative from the national NHS Patient Survey Programme, 2011/12 Survey of Inpatients, on behalf of the Care Quality Commission. For quality of estate, the metrics used were considered as indicators of overall patient satisfaction. Data were considered by the clinical advisory group to decide whether patient experience and estate quality scores would differentiate the options.

35. The clinical advisory group recommended that the options were to be rated equally – each Trust was constantly striving to improve the quality of its estate and enhance patient experience. Therefore each of the proposed options with four 24/7 acute emergency admitting hospitals would have a positive impact.

Figure 7: Evaluation of sub-criterion 1B – Patient experience and estate quality



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36. The clinical advisory group based this assessment on the principle that with recent investment across sites in south east London that were being evaluated, there was

no way to differentiate between the options on quality of estate. Additionally, patient experience was assumed to improve with four 24/7 acute emergency admitting hospitals as a consolidation of services would increase the scale of care, providing greater opportunity for improved training and professional standards to meet patients' needs.

2: Access to care

2A: Distance and time to access services

37. In order to evaluate the impact of each proposed option on distance and time to access services, the impact on the population weighted average travel times for options 2, 3 and 4 were considered by the clinical advisory group, in comparison to option 1. These were based on activity and travel time estimates for blue light travel, private car (am peak) and public transport (am peak).

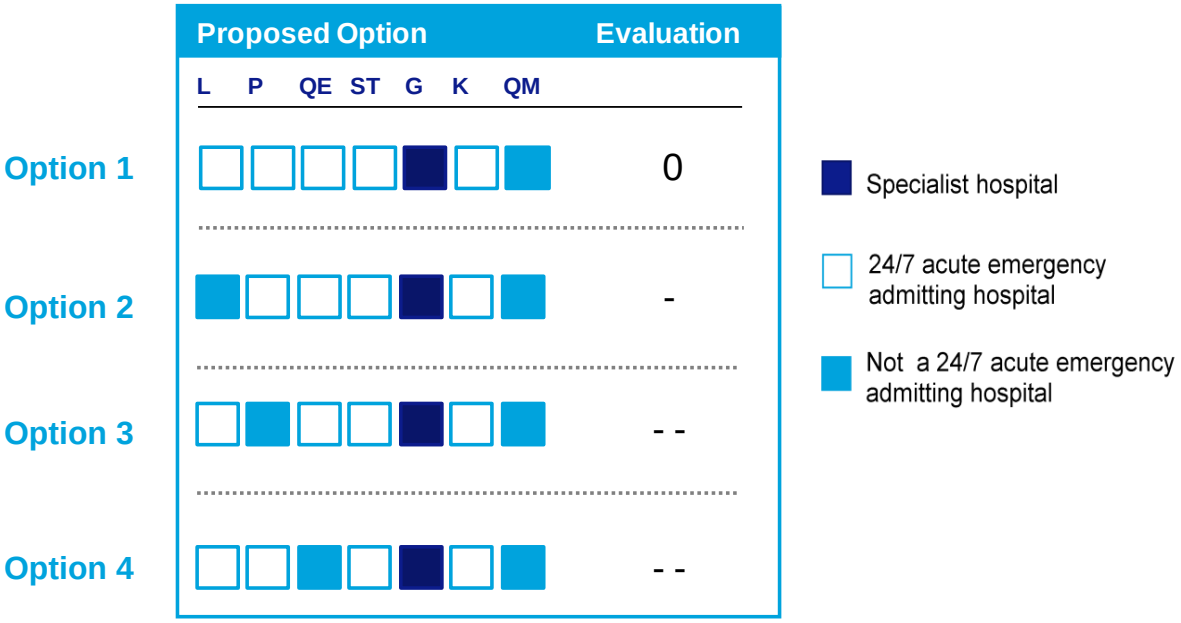
Figure 8: Change in weighted average travel time (minutes)

	Blue Light		Private Car (am peak)		Public Transport (am peak)	
	Average	95th Percentile	Average	95th Percentile	Average	95th Percentile
Option 2	1.4	1.3	2.2	2.0	2.7	1.1
Option 3	1.8	7.3	2.5	11.0	3.3	13.4
Option 4	1.8	4.0	2.6	6.0	3.4	11.4

Sources: Transport for London; HSTAT travel time model, TSA SEL travel time model

38. Options 2, 3 and 4 were scored negatively when compared to option 1, by the clinical advisory group. The clinical advisory group concluded that for all options with four 24/7 acute emergency admitting hospitals, travel times would be adversely affected compared to having five 24/7 acute emergency admitting hospitals. Furthermore, the negative impact would be greater for the options that proposed to change the configuration of services at Princess Royal University Hospital (option 3) and Queen Elizabeth Hospital (option 4).

Figure 9: Evaluation of sub-criterion 2A – Distance and time to access services



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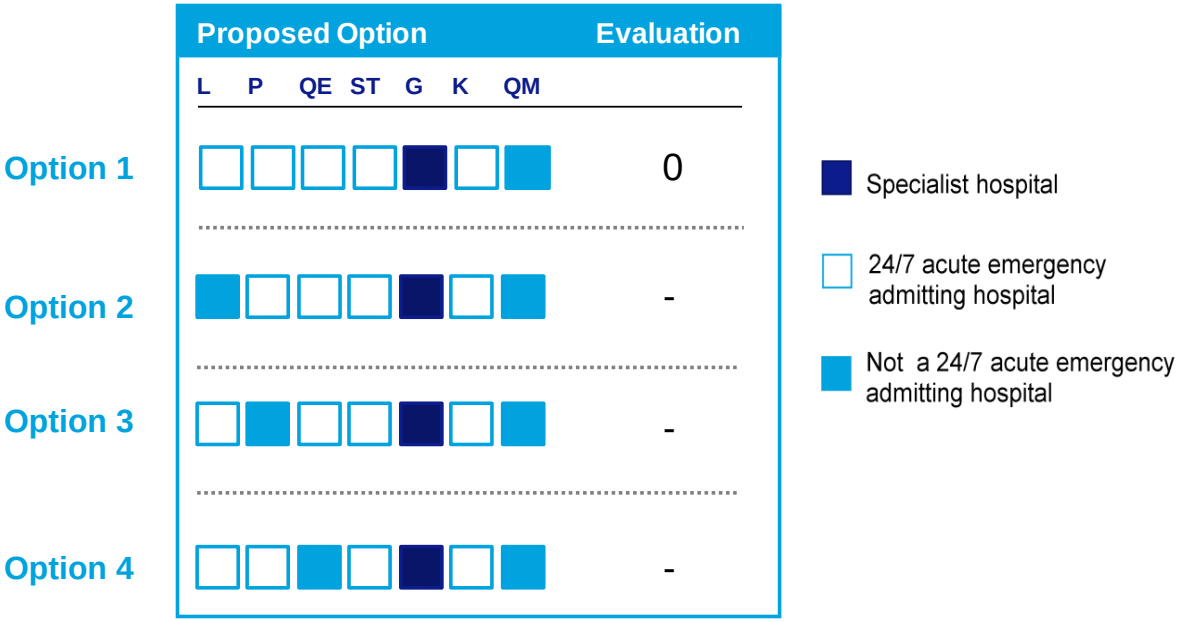
2B: Patient choice

39. In terms of the impact on patient choice, the indicator considered was the level of choice and ease of exercising that choice experienced by the patient at every stage of interaction with the hospital. All proposed options with four 24/7 acute emergency admitting hospitals impacted negatively compared to the option of developing five 24/7 acute emergency admitting hospitals.

Figure 10: Evaluation of sub-criterion 2B – Patient choice



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40. The clinical advisory group concluded therefore that each proposed option with the development of four 24/7 acute emergency admitting hospitals scored negatively against the option to develop five 24/7 acute emergency admitting hospitals, as each of them would result in a reduction of patient choice.

2C: Access to integrated services

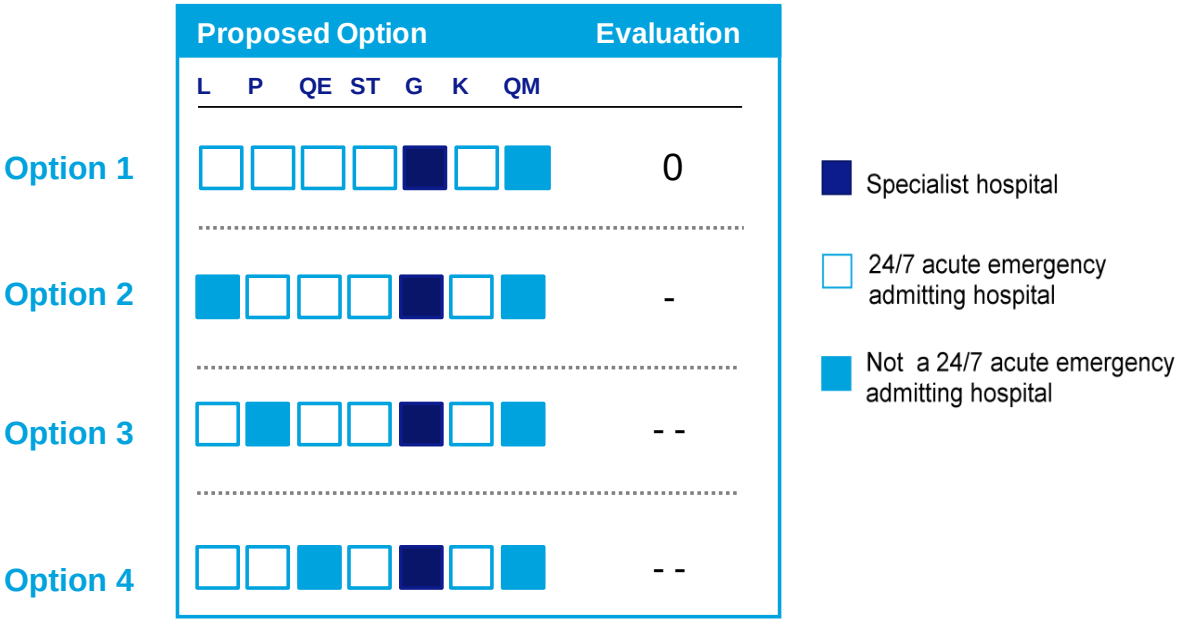
41. For access to integrated services, metrics to demonstrate the level and effectiveness of integrated care between a hospital site and community-based services were considered by the clinical advisory group.

42. The clinical advisory group highlighted that South London Healthcare NHS Trust was deemed to be the best performer when considering average length of stay for elderly patients, readmission rates and delayed transfers of care, all of which were considered to be good proxy measures for access to integrated services. The Trust had an average length of stay for elective patients of 4.0 days in 2011/12 and 9.9 days for non-elective patients – both of which were lower than the national average. 28-day readmission rates for the Trust in 2011/12 were 2.3% for elective patients and 11.4% for non-elective patients. With regard to delayed transfers of care, these occurred for 4.0% of patients living in the home boroughs of the Trust (Bromley, Bexley and Greenwich) and for 2.7% of patients living outside of these boroughs.

43. The clinical advisory group noted that University Hospital Lewisham's acute emergency average length of stay (10.5 days) and rates of delayed discharge (7% and 11% for home borough and non-home borough respectively) were some of the highest amongst the Trusts in south east London.

44. The options to develop four 24/7 acute emergency admitting hospitals scored negatively compared to the option to develop five 24/7 acute emergency admitting hospitals, with those options that propose not to have a 24/7 acute emergency admitting hospital at Princess Royal University Hospital (option 3) and Queen Elizabeth Hospital (option 4) deemed to cause the greatest deterioration in terms of access to integrated services.

Figure 11: Evaluation of sub-criterion 2C – Access to integrated services



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

3: Value for money

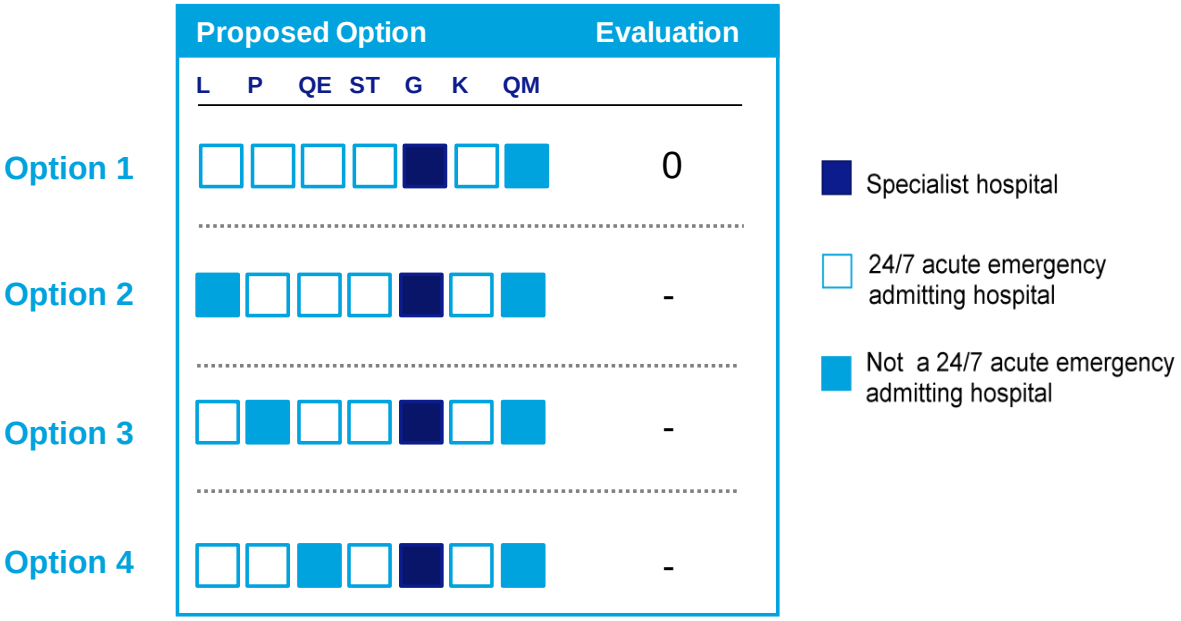
45. This assessment was undertaken by the finance, capital and estates group at its meetings on 27 September and 4 October.

3A: Capital cost to the system

46. The capital costs were identified as being £45m for option 2, £65m for option 3 and £102m for option 4. The key assumptions in assessing these costs (appendix M) were that:

- all mothballed beds are available for re-opening at no additional capital costs;
- the first 90 beds would cost £225k per bed;
- beyond 90 beds the cost per bed would rise to £600k a bed, reflecting the additional support structure required for such a large growth in capacity.

Figure 12: Assessment of sub-criterion 3A – Capital cost

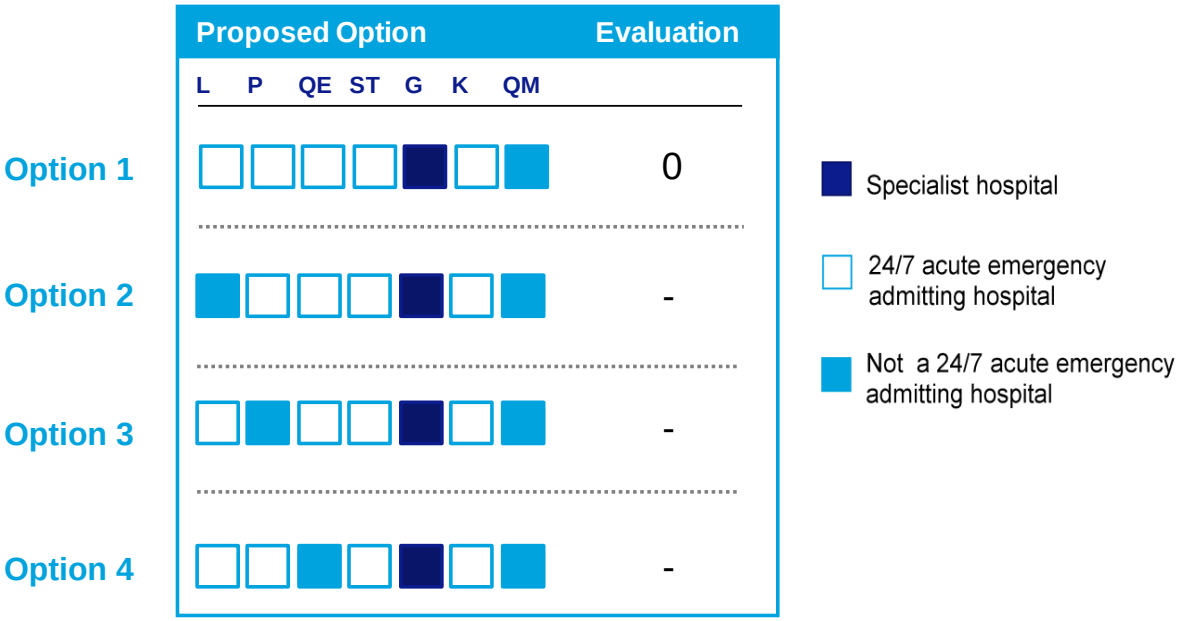


Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

3B: Transition costs

47. At the time of the financial assessment of the options, the transition costs were identified as being £33m for option 2, £45m for option 3 and £41m for option 4, as double running costs of £250 per bed day for a year of implementation.

Figure 13: Assessment of sub-criterion 3B – Transition cost

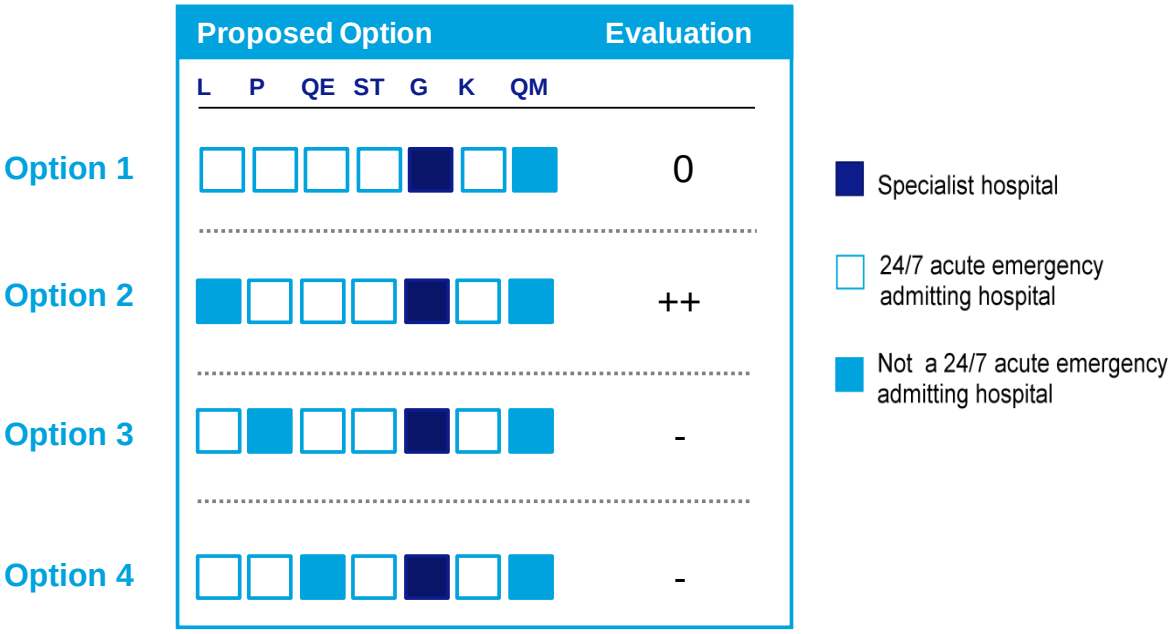


Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

3C: Fixed cost and operational savings

48. At the time of the financial assessment of the options, the fixed cost savings were identified as being £29m (a year) for option 2. There was no impact for option 3 and an additional £4m cost for option 4. The key driver of this difference is the ability to dispose of considerable parts of the estate at University Hospital Lewisham estate under option 2.

Figure 14: Assessment of sub-criterion 3C – Fixed cost and operation savings

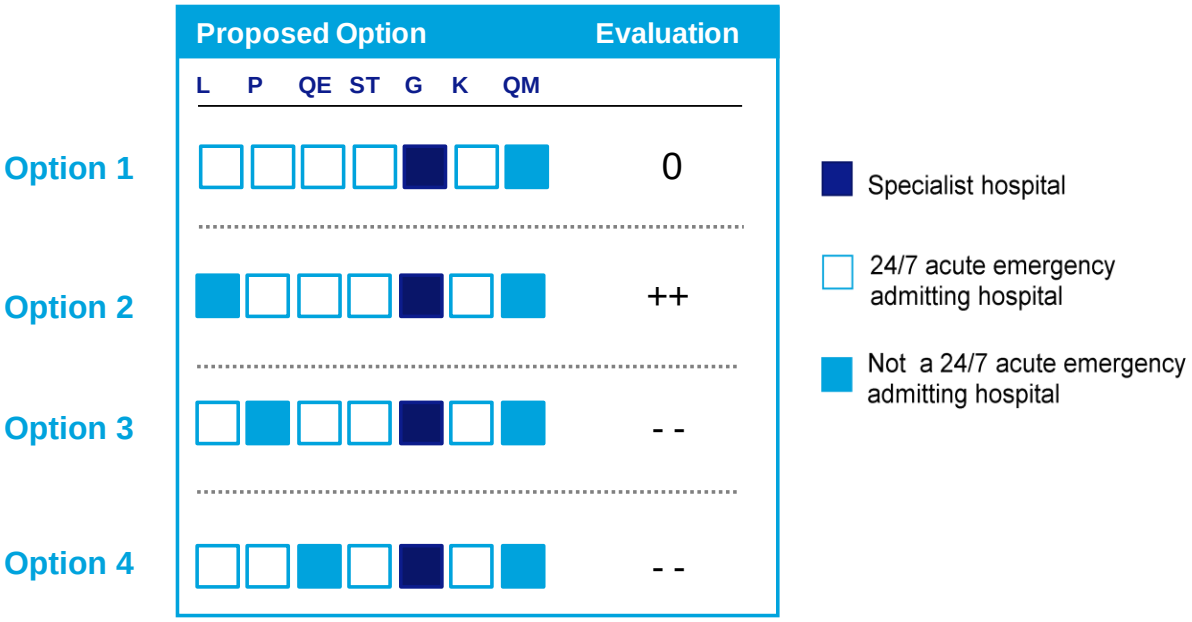


Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

3D: Net present value (relative to the current forecast)

49. At the time of the financial assessment of the options, the net present value (when compared to the current forecast) was identified as being +£283m for option 2 and a net present value of -£107m for option 3 and -£278m for option 4. This assessment was conducted over a 20-year period, with a 3.5% discount rate with the assumption of no terminal value. Other time periods were also looked at, with no material difference to the overall assessment.

Figure 15: Assessment of sub-criterion 3D – Net present value (relative to the current forecast)



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

3E: Site viability

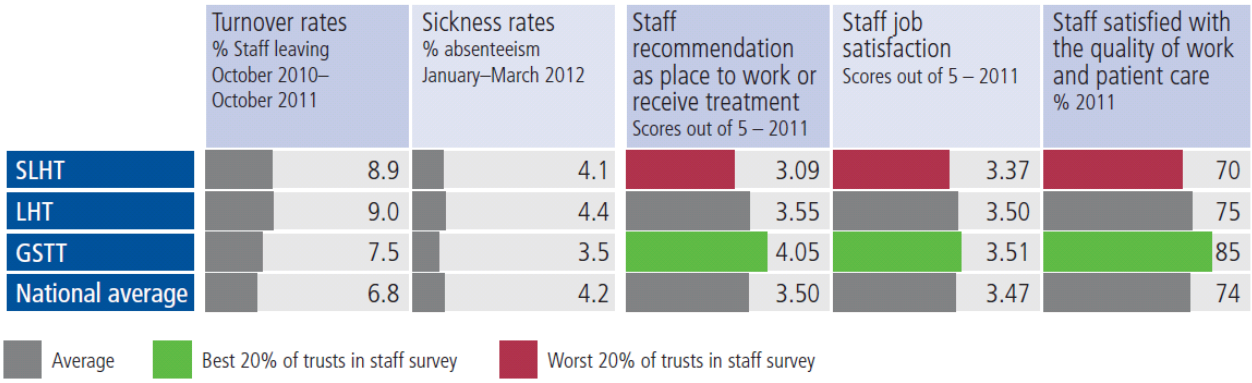
50. At this stage of the options evaluation process, none of the proposed options resulted in the financial viability of any of the hospital sites. Financial viability of an individual site is only achieved through a combination of actions.

4: Deliverability

4A: Workforce

51. In order to evaluate each of the options in terms of the impact that each would have on the future workforce, the clinical advisory group considered a qualitative assessment based on overall turnover, sickness and staff satisfaction rates (figure 16). In doing so, each of the options was rated equally.

Figure 16: Turnover, sickness and staff satisfaction rates at south east London trusts

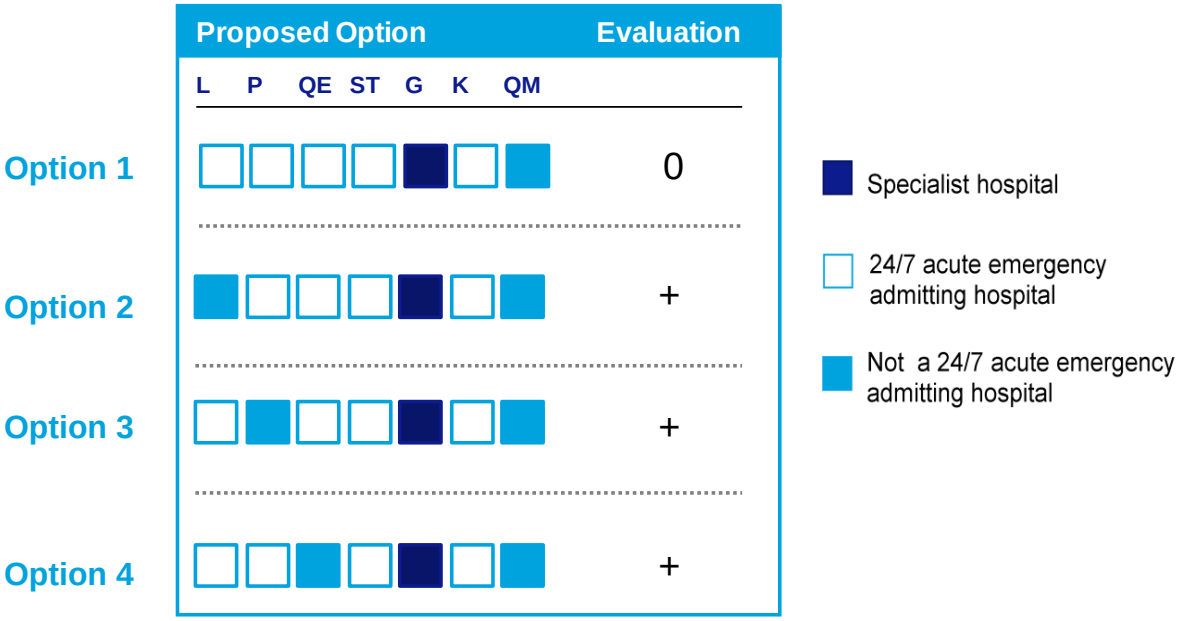


Sources: NHS Information Centre (workforce section) January to March 2012, Sickness Rates in the NHS; National NHS Staff Survey 2011, National NHS Staff Survey Co-ordination Centre, Department of Health

52. The clinical advisory group noted that Guy's and St Thomas' NHS Foundation Trust was the strongest performer on staff turnover and staff satisfaction, compared to South London Healthcare NHS Trust and Lewisham Healthcare NHS Trust. South London Healthcare NHS Trust had low performance when it came to staff satisfaction and along with all trusts in south east London had above average turnover rates. Additionally, Lewisham Healthcare NHS Trust had the highest turnover and sickness rates and staff satisfaction levels close to the national average.

53. The clinical advisory group advised that consolidating acute hospital services on to fewer sites would make it easier to recruit, motivate and retain a high quality, highly trained workforce. Additionally, such consolidation would help generate additional scale to support training and development of staff better and in a sustainable way. The group also highlighted that the financial stability of an organisation would make it easier to attract and retain staff. The difficulty in forecasting future trends in this area and, hence, differentiating between the options, resulted in the options to develop four 24/7 acute emergency admitting hospitals being scored equally and more positively than the option to develop five 24/7 acute emergency admitting hospitals.

Figure 17: Evaluation of sub-criterion 4A – Workforce



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

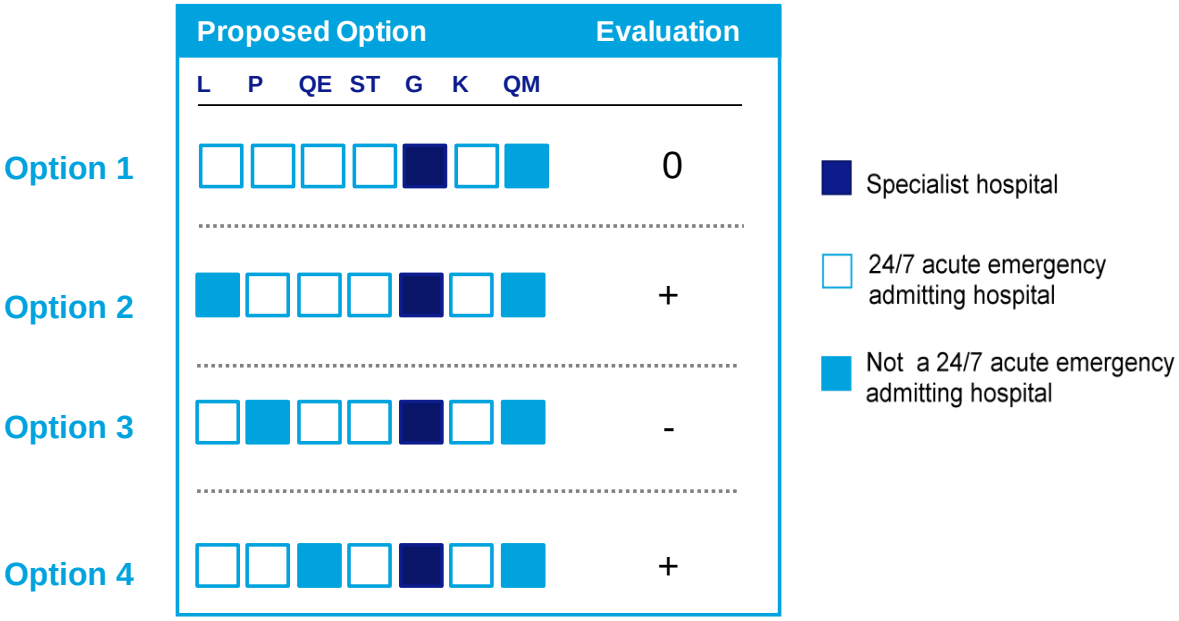
4B: Expected time to deliver

54. The expected timescale for implementing each of the proposed options was not fully evaluated by the clinical advisory group. The clinical advisory group was advised that the quantity of bed movements would form the basis of the assessment of the time required to implement the changes.

4C: Co-dependencies with other strategies

55. To consider the impact of the proposed options on their co-dependencies with other strategies, the clinical advisory group chose to look at the strategic interface between the London Stroke Strategy and the development of 24/7 acute emergency admitting hospital. The clinical advisory group highlighted that any change in the configuration of services at Princess Royal University Hospital would impact negatively. It noted the need to have an A&E department and supporting infrastructure on this site to support the hyper-acute stroke unit located at the Hospital, which due to its geographical location was the only option for hyper-acute stroke services in this part of south east London. This proposed option (option 3) was therefore scored lower. The other two proposed options (options 2 and 4) for developing four 24/7 acute emergency admitting hospitals were rated equally.

Figure 18: Evaluation of sub-criterion 4C – Co-dependencies with other strategies



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

56. The clinical advisory group based this assessment on their opinion that the proposed options not to develop either University Hospital Lewisham (option 2) or Queen Elizabeth Hospital (option 4) as a 24/7 acute emergency admitting hospital could not be differentiated between. These options therefore scored positively against the option to develop five 24/7 acute emergency admitting hospitals.

57. At this stage, due to the inter-dependency with the changes implemented as a result of the pan-London stroke strategy the clinical advisory group recommended that the proposed option to not develop Princess Royal University Hospital (option 3) as a 24/7 acute emergency admitting hospital should no longer be an option for consideration. The rationale for this was that the Princess Royal University Hospital is the location of a hyper-acute stroke unit, providing specialist stroke care to the population of south east London. This was agreed and developed following the pan-London consultation on stroke services in London in 2009. At the time decisions were taken, it was agreed that there was no other hospital site in this part of London that could meet the clinical criteria and be within a 30-minute 'blue light' ambulance journey, the travel time standard established by clinicians as the proposals for improving stroke services were developed.

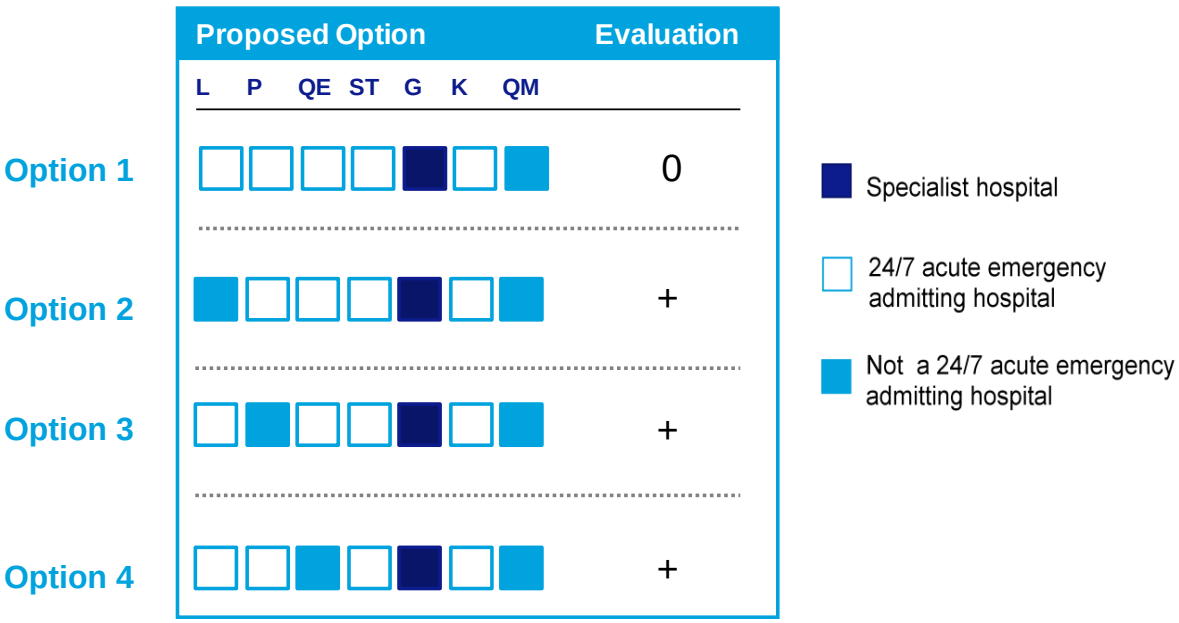
5: Research and education

58. In order to consider the impact that each of the proposed options would have on research and education, the assessment of the degree to which each proposed option would disrupt or damage current and future potential research and education - measured by a percentage of total spend on education impacted by changes - was considered by the clinical advisory group. Additionally, the assessment of the overall

satisfaction levels, as indicated by General Medical Council trainee surveys and staff surveys, was taken into consideration.

59. The evaluation of the proposed options highlighted that consolidation of services would concentrate expertise and opportunities for research and education. Together, this would provide an improved environment for education and therefore scored positively. Disruption to nursing education was cited as an important factor, but it was recognised that was difficult to assess. The clinical advisory group recommended combining the assessment of the impact of the options on research and education into one, so as not to give the criterion disproportionate weight in the overall assessment

Figure 19: Evaluation of sub-criterion 5 – Research and education



Key: L - University Hospital Lewisham; P - Princess Royal University Hospital; QE - Queen Elizabeth Hospital; ST - St Thomas' Hospital; G - Guy's Hospital; K - King's College Hospital; QM - Queen Mary's Hospital Sidcup

60. The clinical advisory group advised that each of the options to develop four 24/7 acute emergency admitting hospitals scored equally and positively compared to developing five 24/7 acute emergency admitting hospitals.

Weighting of the evaluation criteria

61. Weighting of the options evaluation criteria was considered by the clinical advisory group in line with input from clinicians and patient representative groups, with the overriding view being that quality of care was the most important criteria. It was therefore agreed that the best approach would be to double the weighting of scores on quality of care, in effect resulting in each of the two sub-criteria – clinical effectiveness and patient experience and estate quality – having equal weighting to the remaining criteria.

Developing 24/7 acute emergency admitting hospitals

62. Following the recommendations from the clinical advisory group that St Thomas' Hospital, King's College Hospital and Princess Royal University Hospital should be developed as 24/7 acute emergency admitting hospitals, there were three remaining options, Queen Elizabeth Hospital to be developed as a 24/7 acute emergency admitting hospital or University Hospital Lewisham to be developed as a 24/7 acute emergency admitting hospital, or the status quo.

63. The clinical advisory group concluded that the population of south east London would be best served by four hospitals providing emergency care for the most critically unwell.

64. The non-financial and financial evaluation of the option to develop University Hospital Lewisham as a 24/7 acute emergency admitting hospital (option 2) resulted in a score of plus 6 (i.e. the sum of the pluses and the minuses against this option). The non-financial and financial evaluation of the option to develop Queen Elizabeth Hospital as a 24/7 acute emergency admitting hospital (option 4) resulted in a score of minus 3.

65. Figure 20 shows the full scoring of the remaining options against the non-financial and financial criteria.

Figure 20: Evaluation scores

Quality scores were multiplied by 2 to double-weight this criteria

■ Specialist hospital □ 24/7 acute emergency admitting hospital ■ Not a 24/7 acute emergency admitting hospital

++ High evaluation
- - Low evaluation

L	P	QE	ST	G	K	QM	Quality of care (weighted x2): Clinical effectiveness	Quality of care (weighted x2): Estate quality and patient experience	Access: Distance and time to access services	Access: Patient choice	Access: Access to integrated services	Value for money: Capital cost to the system	Value for money: Transition on costs	Value for money: Fixed cost & operational savings	Value for money: Net Present Value	Value for money: Provider viability	Deliverability: Work-force	Deliverability: Expected time to deliver	Deliverability: Co-de-pendencies with other strategies	Research & Education: Conducive to research & education	Sum of pluses and minuses
□	□	□	□	■	□	■	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
■	□	□	□	■	□	■	++	++	-	-	-	-	-	++	++	N/A	+		+	+	6
□	■	□	□	■	□	■	++	++	- -	-	- -	-	-	-	- -	N/A	+		-	+	-5
□	□	■	□	■	□	■	++	++	- -	-	- -	-	-	-	- -	N/A	+		+	+	-3

L: University Hospital Lewisham, P: Princess Royal University Hospital, QE: Queen Elizabeth Hospital, ST: St Thomas' Hospital, G: Guy's Hospital, K: King's College Hospital, QM: Queen Mary's Hospital

66. The outcome of the evaluation process was tested with the TSA advisory group and reviewed by the external clinical panel. The evaluation identified only one clinically and financially viable configuration developing 24/7 acute admitting emergency hospitals in south east London. The option to develop Queen Elizabeth Hospital as a 24/7 acute emergency admitting hospital (option 4) was considered in full, but discounted as it had a more detrimental impact on access and the financial viability of the health economy.

67. On this basis, a draft recommendation was put forward for the TSA's draft report that 24/7 acute emergency care should be provided at four sites – King's College Hospital, St Thomas' Hospital, Queen Elizabeth Hospital and Princess Royal University Hospital – and these hospitals should be developed as 24/7 acute emergency admitting hospitals to meet the agreed London-wide clinical quality standards. Alongside this, University Hospital Lewisham, Guy's Hospital and Queen Mary's Hospital should provide urgent care for those patients that do not need to be admitted to hospital. It was also recommended that emergency services for those patients suffering from a major trauma, stroke, heart attack and complex vascular problems should not change from the current arrangements, which means:

- major trauma services at King's College Hospital;
- hyper acute stroke services at King's College Hospital and Princess Royal University Hospital;
- heart attack services at St Thomas's Hospital and King's College Hospital; and
- emergency vascular services at St Thomas's Hospital.

Consultation responses

68. Responses to consultation from commissioners were broadly supportive of the TSA's recommendation that any future configuration of services in south east London would need to meet the London-wide clinical standards for emergency care. Bromley, Greenwich, Lambeth and Southwark CCGs all endorsed the need for consolidation of services to achieve this.

69. Feedback received from Lewisham CCG during the consultation recognised the need to improve the quality and safety of services by delivering the London clinical quality standards and, therefore, the need for the configuration of acute services to be agreed in line with the London clinical dependency framework (see annex 2). While the recommendation for University Hospital Lewisham to cease providing emergency services and potentially changing obstetric-led births was not supported by Lewisham CCG and other local stakeholders during consultation, they were unable to put forward a viable alternative.

70. An alternative option that Queen Elizabeth Hospital, rather than University Hospital Lewisham, should operate in this way was fully considered but discounted, as implementing that option would have a more detrimental impact both on access and on the financial viability of the health economy.

71. Many of the consultation responses did not support the recommendations, in particular the proposal that A&E services should no longer be provided at University Hospital Lewisham (noting that a large proportion of consultation respondents were Lewisham residents).

72. A significant proportion of respondents were concerned about access to A&E services from the Lewisham borough to the four proposed sites for south east

London. Travel times had been analysed in detail using Transport for London's Health Service Travel Analysis Tool and implementing the proposals for emergency services would increase the journey time to reach an A&E across south east London by an average of approximately one minute for those in a 'blue light' ambulance, two minutes for those using private transport and three minutes for those using public transport. This is shown in figure 21, which also includes the impact on travel time for those whose journeys are relatively long currently (the 95th percentile)[1].

Figure 21: Impact of implementing the proposals on travel times for the population of south east London

Mode of transport:	Weighted average (min)			95th percentile (min)		
	Current	Proposed	Change	Current	Proposed	Change
'Blue light' ambulance	15.4	16.8	1.4	24.0	25.3	1.3
Private transport	23.0	25.2	2.2	36.0	38.0	2.0
Public transport	32.9	35.7	2.7	52.5	53.6	1.1

73. As the proposed changes are for those who are critically unwell, travel times to emergency services for 'blue light' ambulances are very important. Clinicians advising the London-wide programme to improve stroke services concluded that the journey time to the relevant emergency centre should be no more than 30 minutes in a 'blue light' ambulance. Similarly, for a major trauma, clinicians concluded that the journey time should be no more than 45 minutes.

74. Using 30 minutes as the benchmark for accessing emergency services, figure 22 shows the proportion of patients in south east London within 30 minutes of one or more A&E department in a 'blue light' ambulance if the recommendation were to be implemented.

Figure 22: Access to A&E services for the population of south east London

Number of A&Es within 30 minutes in a 'blue light' ambulance (nearest 5%)	1 or more	2 or more	3 or more
Current	>95	>90	>75
If draft recommendation 5 were implemented	>95	>85	>65

75. Many of the concerns raised during consultation focused on access to A&E services for Lewisham residents to the proposed four acute emergency admitting hospitals. As shown in figure 22, travel time analysis undertaken confirms that travel times to A&E departments after implementation of the recommendation are within the acceptable limit. However, there are increases in travel times for some residents of

[1] Explanatory note: the 95th percentile is used to consider those who have the longest travel time; in doing this a point at the 95th percentile (where 1 is a short travel time and 100 is a long travel time) is used in order to prevent data outliers distorting the result.

Lewisham, with the weighted average travel time for 'blue light' ambulance journeys increasing by seven minutes, as shown in figures 23 and 24.

Figure 23: Impact of recommendation on travel times for the population of Lewisham

Mode of transport:	Weighted average (min)			95th percentile (min)		
	Current	Proposed	Change	Current	Proposed	Change
'Blue light' ambulance	13.2	20.6	7.4	18.1	26.8	8.7
Private transport	19.7	30.7	11.0	27.0	40.0	13.0
Public transport	26.7	40.8	14.1	40.1	51.2	11.1

Figure 24: Access to A&E services for the population of Lewisham

Number of A&Es within 30 minutes in a 'blue light' ambulance (nearest 5%)	1 or more	2 or more	3 or more
Current	>95	>95	>95
If draft recommendation 5 were implemented	>95	>95	>70

76. Travel times to emergency services in south east London, including for the residents of Lewisham, would continue to be very good if the proposed changes were implemented. Put in the context of access to A&E services nationally, while access for many residents of the London borough of Lewisham is worse than at present under this recommendation, it is still much better than the access many residents across England currently have to A&E services.

77. Concerns were raised during consultation about the capacity of the remaining four hospitals to take on additional activity after the changes to emergency care are implemented. This has been considered, and capital investment of £37m, for expanding A&E departments and the number of emergency beds to cope with additional demand at these hospitals, has been factored into transition costs. It is also expected that some staff will also transfer, so that there will be sufficient capacity in the system to ensure no negative impact on the quality of services or waiting times in A&E departments. Other changes, including a reduction in average lengths of stay and improvements in the provision of community-based care, will also help to reduce the demand and therefore minimise the increased pressure on the other hospital sites. The need to make such changes was raised in meetings during the consultation and will form part of the three-year transitional change programme.

78. Significant concerns were raised during consultation about the lack of commentary on and specific proposals on paediatric services. In the development of the draft recommendations, the clinical advisory group and the external clinical panel did discuss paediatrics and a workshop was held on 24 September 2012 specifically to consider the clinical quality standards for paediatrics and potential implications of implementation. All stakeholders endorsed the principles of the clinical quality

standards and these formed the basis for the recommendation on hospital configuration.

79. Throughout discussions it was clear that sustaining the current number of paediatric inpatient units in south east London would not be viable, due to the volumes of patients and the shortfall in consultant workforce. During the clinical advisory group meeting of 10 October 2012 and the external clinical panel meeting of 6 December 2012, it was considered whether the units should be consolidated further than the recommended consolidation of acute admitting sites and options for two or three paediatric inpatient units were considered.

80. However, when considering the need to maintain good access and ensure the required clinical dependencies were in place it was concluded that, at this stage, paediatric inpatient units should be recommended at each acute admitting hospital. Although it was raised at these meetings that the local NHS may need to consider further consolidation of these services at some point in the future.

81. Responses to the consultation highlighted that paediatric services at University Hospital Lewisham are held in high regard for their quality and the strong integrated care pathways that have been developed with community services, such as those for patients with chronic obstructive pulmonary disorder. Clinical and non-clinical working groups highlighted that careful planning would be needed to ensure these pathways are maintained in the development of the services that are proposed to remain at University Hospital Lewisham for children that do not require admission and that robust protocols are developed for those that do require admission. It was also proposed that a paediatric ambulatory service is developed as part of the urgent care service at University Hospital Lewisham.

82. Clinicians also highlighted that particular attention would need to be paid in implementing the recommended changes to the building of strong relationships and clear referral pathways between social care services and the four acute emergency admitting hospitals, thus ensuring that safeguarding children – and vulnerable adults – is at the forefront of service planning.

83. Analysis included in the draft recommendation suggested that an estimated 77% of the people who currently attend University Hospital Lewisham's A&E and urgent care services would continue to be suitably treated at the University Hospital Lewisham site. A number of responses to consultation suggested that this activity estimation was too high. Therefore, further analysis was undertaken and, based on practice elsewhere in London; a revised figure of 50% has been used for the modelling that underpins the TSA's recommendation. This revised figure was considered and endorsed by the external clinical panel as a more achievable figure.

84. The multiplicity of offerings for urgent and emergency care is currently the subject of work being undertaken by the Medical Director of the NHS, the aim of which is to eradicate the confusion that many people experience in understanding which

emergency and urgent care services are provided at different places. Reflecting on what the public said during the TSA's consultation, emergency and urgent care services across all sites in south east London should be developed in line with the output from the Medical Director's work as it emerges.

85. The types of conditions urgent care services will be able to treat include:
    - Many illnesses and injuries not likely to need a stay in hospital;
    - Minor fractures (breaks);
    - Stitching wounds;
    - Draining abscesses that do not need general anaesthetic; and
    - Minor ear, nose, throat and eye infections.

86. These services will be equally applicable to paediatric patients and for both – adults and paediatrics – where patients need to be admitted to hospital; robust 'treat and transfer' protocols will apply. These currently exist and are found to be effective in ensuring patients are transferred to the correct location for their condition, for example heart attack patients who are transferred to one of eight heart attack centres in London for appropriate specialist treatment.

Health and Equalities Impact Assessment: urgent and emergency care

87. The Health and Equalities Impact Assessment (HEIA) has stated that reduced access to A&E services can disproportionately impact on economically and socially deprived groups. This impact will be mitigated by the improved quality of care at those hospitals that will provide emergency department services in the future. The HEIA states: "*The change in travel time, relating to emergency and urgent care currently at University Hospital Lewisham, is not statistically correlated with economic and social deprivation*", although there is an impact on those considered in the broader category of "health deprivation".

88. The entire socially and economically deprived population in south east London will continue to be within around 30-minutes 'blue light' ambulance journey of an A&E department. However, as a result of the changes to urgent and emergency care this section of the population will also be impacted by increased costs of both private and public transport journeys and this point is particularly relevant for patients who will have to travel from care. As outlined in the HEIA, in order to mitigate this impact, more information should be made available on cost support schemes already in place, including the Healthcare Travel Costs Scheme which entitles patients who receive income support and income based jobseekers allowance to full or partial reimbursement of travel expenses to and from care. Although it is noted that this may not help deprived relatives and carers, and other mechanisms may need to be considered. Discussions have begun with Transport for London that could also lead to changes in travel routes, which might reduce travel times and costs.

89. In terms of age, children (0-15 years) are associated with high, and growing, levels of A&E usage. The HEIA report states: *"…the majority of children currently attending A&E at University Hospital Lewisham could continue using the urgent care services. Through streamlining A&E attendances and ensuring that children with minor conditions are treated by urgent care services or by their own GP, there is a potential positive impact on health outcomes overall as critical A&E paediatric specialists are freed to deal with the most serious conditions in a small number of hospitals*".

90. The model of paediatric care to be delivered at University Hospital Lewisham will be based on the population's need and developed by drawing on the excellent service currently provided. Throughout the transitional period improved information will be supplied to parents to ensure they are aware of the range of services to be provided at the site.

91. Older people are also relatively frequent users of A&E services and are more than twice as likely as others to be admitted to hospital following an A&E attendance. Therefore, the proposed changes have significant implications for continuity of care for these patients. However, older people who would currently present with problems at University Hospital Lewisham could benefit from being admitted to a step-up facility there, or will need to be transferred and admitted to another hospital before being transferred back to a step-down facility at University Hospital Lewisham. These multiple interfaces will require clear protocols and robust systems in place to ensure adequate continuity of care is maintained.

92. When considering race, the HEIA identifies that stroke and hypertension are disproportionately prevalent amongst people from black, asian and minority ethnic (BAME) groups. However, these services are already centralised and, as such, there is no expected impact of the proposed changes on health outcomes for these patients. Sickle cell anaemia tends to be more prevalent amongst people from BAME groups and has a high level of prevalence in south east London. The condition presents in crisis in A&E and requires appropriate diagnosis and often rapid treatment. Therefore, it will be important to ensure that the skills and expertise of staff providing urgent care at University Hospital Lewisham are maintained and that the capacity to treat patients at the four remaining A&E departments is expanded as appropriate.

93. BAME groups tend to have lower levels of GP registration rates than the population as a whole and are more likely to attend urgent care settings, to access healthcare. The HEIA shows a correlation between BAME populations and those negatively impacted by travel time changes. It will be important to ensure that there is sufficient relevant information on the services provided if the recommendation is accepted and implemented, and that this information is accessible for BAME groups.

94. Mental health and coronary heart disease are particular health issues for people with learning disabilities. The proposed changes will have no negative impact for these patients. South east London as a whole has high rates of emergency admissions for patients with respiratory disease, another significant issue for people with learning disabilities. This service should be better managed in primary and community settings and implementation of the Community Based Care strategy will have a positive impact on the quality of care received by this group.

95. Similar to other groups with protected characteristics, there is a correlation between this group and negative impact on travel times. It will be important to ensure that measures taken to improve information available are developed with regard to those with disabilities. Small improvements to infrastructure can have significant positive health impacts, for example an induction hearing loop should be installed at Queen Elizabeth Hospital.

Recommendation

96. Having regard to the responses to the consultation, the HEIA, and that no viable alternative solution was proposed, the TSA's recommendation is that 24/7 acute emergency care should be provided at four sites in south east London – King's College Hospital, St Thomas' Hospital, Queen Elizabeth Hospital and the Princess Royal University Hospital – and these hospitals should be developed as 24/7 acute emergency admitting hospitals to meet the minimum London-wide clinical quality standards. This view was also endorsed by the external clinical panel in light of their consideration of the consultation responses.

97. Services at University Hospital Lewisham, Guy's Hospital and Queen Mary's Hospital should provide urgent care for those that do not need to be admitted to hospital. Emergency care for those patients suffering from a major trauma (provided at King's College Hospital), stroke (provided at King's College Hospital and the Princess Royal University Hospital), heart attack (provided at St Thomas' Hospital and King's College Hospital) and complex vascular problems (provided at St Thomas' Hospital) will not change from the current arrangements.

Maternity services

98. As the clinical advisory group was undertaking the full evaluation of the options for developing 24/7 acute emergency admitting hospitals in south east London, Lewisham Healthcare NHS Trust proposed the retention of obstetric and co-located midwifery-led maternity services on the University Hospital Lewisham site. Two options were therefore presented in the TSA's consultation, to ensure the provision of high quality of care for women needing to be in hospital during pregnancy and for women when giving birth. Both of these options include ante-natal and post-natal care provided, as now, at current hospital sites and in community settings.

99. Therefore, the two options were whether south east London has four or five hospital sites providing obstetric-led services:

    i) The option of four hospital sites: King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital would all provide obstetric-led births, meaning these services are co-located with full emergency critical care. This co-location was the initial proposal developed by clinicians and endorsed by the external clinical panel. However, this option would mean the four sites would need to increase capacity which would require some investment.

    ii) The option of five hospital sites: King's College Hospital, Princess Royal *University* Hospital, Queen Elizabeth Hospital, St Thomas' Hospital and University Hospital Lewisham would all provide obstetric-led births. In this option, University Hospital Lewisham would not have full emergency critical care co-located with its maternity unit; instead it would have a surgical high dependency unit with obstetric anaesthetists present. This means the service would only take lower risk obstetric-led births. This option would provide better access to obstetric-led services in south east London. It would also provide more resilience to the needs of a growing population.

Forecasting births in south east London

100. As was outlined in the TSA's draft report, there is a range of views on the expected birth rate in south east London over the next 3 to 10 years. It was recommended that agreement should be reached on the best projection so that correct assumptions on capacity requirements could be used to inform the final recommendation.

101. During the development of the draft recommendation, the TSA had gathered from each provider Trust their forecast births for 2012/13. These were validated by the finance, capital and estates advisory group and shared with the clinical advisory group. The baseline data (shown as totals for each of the five hospitals with maternity services in south east London) is set out in figure 25.

Figure 25: Forecast births in south east London 2012/13

Hospital site	Births in 2012/13*
LEW	4,222
PRUH	4,603
QEH	4,386
STT	6,630
KCH	5,500
Total	25,341

* 2012/13 was based on mid-year figures and extrapolated to provide a full-year forecast

Key: LEW - University Hospital Lewisham; PRUH - Princess Royal University Hospital; QEH - Queen Elizabeth Hospital; STT - St Thomas' Hospital; KCH - King's College Hospital

102. The TSA's forecast birth rates for 2013/14 and 2014/15 were based on commissioners' plans for those years (which themselves were based primarily on Greater London Authority (GLA) forecasts). The birth rates forecast for subsequent years were then based on Office of National Statistics (ONS) data on population projections.

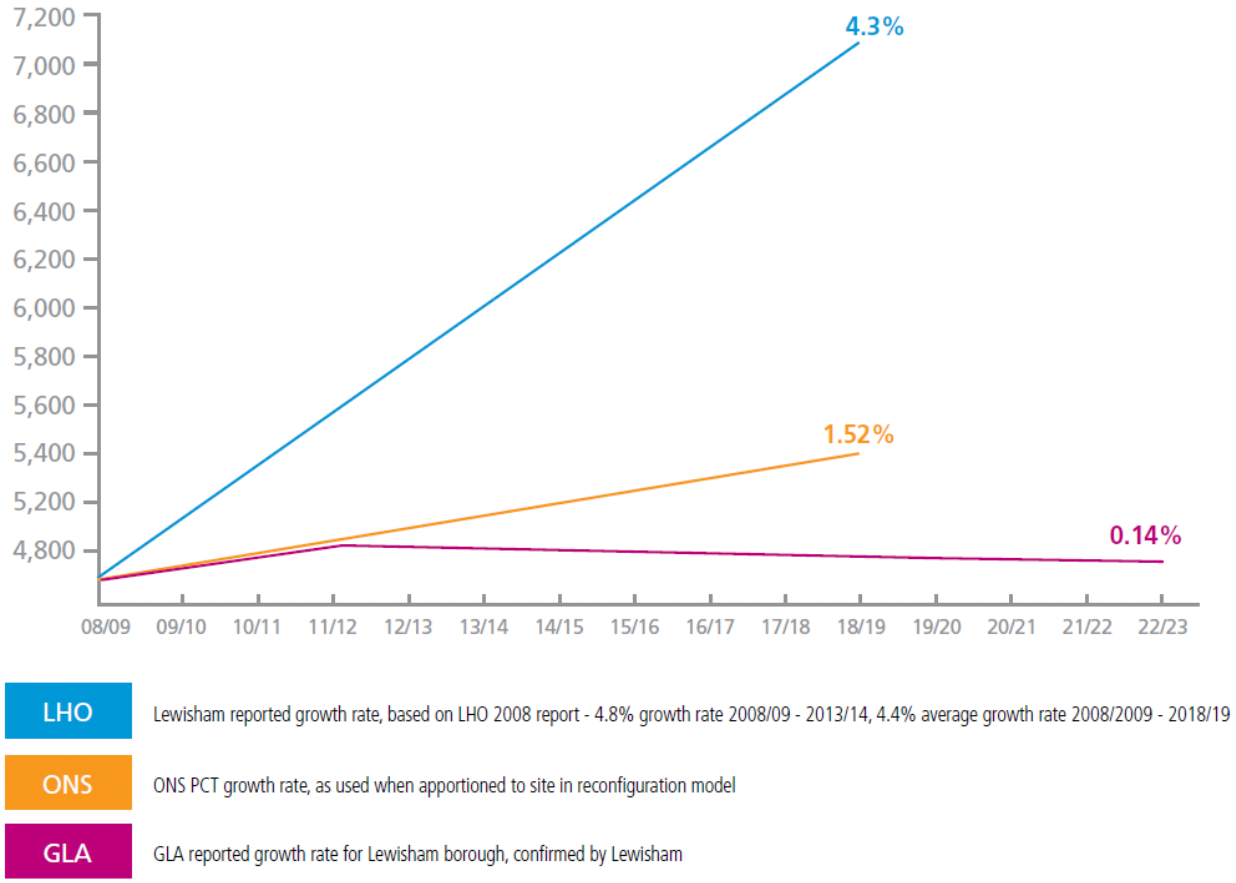
103. Lewisham Healthcare NHS Trust was concerned that the TSA's forecast for birth rate numbers in 2015/16 was an underestimation. This was based on the Trust's own forecast, based on its review of Hospital Episode Statistics (HES) data for the three years 2009/10 to 2011/12 and, for 2012/13 and beyond, based on London Health Observatory's (LHO's) borough-level projections, which had been published provided in 2008[2].

104. The TSA's team considered that because HES data, while a useful data repository, is updated intermittently by Trusts and not used as a basis for contracting, Trust-reported data was a more accurate basis for forecasting birth rates in 2012/13. These forecast birth rates were then compared to other data available, including the GLA's and the LHO's. The LHO forecasts were deemed inaccurate as, when compared with actual activity from 2008/09 (the base year) to 2011/12, LHO data shows significantly higher forecast birth rates than actually observed.

105. Having discounted the LHO population projections as unreliable data, the TSA's team considered GLA and ONS data further. Although Lewisham and Greenwich local authorities confirmed their use of GLA population projections for forecasting births in those two boroughs, it was agreed by CCGs and Trust planning and finance leads that the ONS data would be used for the TSA's forecast of birth rates, as these were the higher figures and would therefore ensure that the capacity required for maternity services at south east London's hospitals would not be underestimated. Figure 26 shows the comparative data for projected birth rates in the borough of Lewisham.

[2] London Health Observatory, *Estimating future births in the Capital: A discussion document*, 2008

Figure 26: Lewisham borough birth projections data – comparing growth rates applied to GLA borough baseline



106. In order to forecast births across south east London, Trust-reported data for 2012/13 birth rates were rolled forward and forecast to 2013/14 based on the demographic growth forecast in commissioners' plans, and beyond 2013/14 based on ONS population projections. All assumptions were discussed and endorsed by the six CCGs and the Trusts' planning and finance teams.

107. The borough-level birth rate forecasts were then allocated to the five hospitals with maternity services in south east London, based on the activity accruing to each site from each borough. The forecast birth numbers are shown in figure 27.

Figure 27: Forecast births in south east London 2012/13 to 2015/16 and annual growth

Hospital	2012/2013	2013/2014	2014/2015	2015/2016	Annual growth
LEW	4,222	4,237	4,275	4,335	0.88%
PRUH	4,603	4,629	4,657	4,685	0.59%
QEH	4,386	4,433	4,493	4,542	1.17%
STT	6,630	6,705	6,780	6,865	1.17%
KCH	5,500	5,560	5,621	5,691	1.14%
Total	**25,341**	**25,563**	**25,825**	**26,117**	**1.01%**

Key: LEW - University Hospital Lewisham; PRUH - Princess Royal University Hospital; QEH - Queen Elizabeth Hospital; STT - St Thomas' Hospital; KCH - King's College Hospital

108. The external clinical panel accepted the approach and process that had been used to forecast births in south east London as appropriate and robust.

Evaluation of the options

109. Clinical quality standards for maternity services have been developed (appendix P) and were endorsed by the London Clinical Senate in September 2012 and London-wide Clinical Commissioning Council in November 2012, along with clinical dependencies for hospital-based acute emergency and maternity services (annex 2).

110. During the development of the draft recommendations, the clinical advisory group and external clinical panel considered these clinical quality standards and further endorsed them and advised the TSA that any future models of maternity care in south east London should consistently meet these standards to secure long-term clinical sustainability.

111. Option 1 (four sites) would provide obstetric units with co-located midwifery-led units on each of the four sites: King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital. Maternity services would therefore be co-located on the same site as 24/7 acute admitting emergency hospitals which would enable all of the clinical dependencies (annex 2) for obstetrics to be met. All maternity services would meet the London clinical quality standards (appendix P). Antenatal and postnatal care would be provided at King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital, St Thomas' Hospital and University Hospital Lewisham (and/ or in the community).

112. Option 2 (five sites) would provide obstetric units with co-located midwifery-led units on each of the four sites: King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital. For University Hospital Lewisham, an obstetric unit and co-located midwifery led unit, not located on the same site as 24/7 acute admitting emergency hospital would be provided. Maternity services at University Hospital Lewisham would be provided as a single service within a new Lewisham-Greenwich organisation, operating across the University Hospital Lewisham and Queen Elizabeth Hospital. All maternity services would meet the London clinical quality standards (appendix P). Antenatal and postnatal care would be provided at King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital, St Thomas' Hospital and University Hospital Lewisham (and/ or in the community). Additionally, all maternity services would need to meet the clinical dependencies (annex 2) with critical care provided through the proposed elective centre. Forecasted births for each of the options are shown in figure 28.

Figure 28: Forecasted births 2015/16 in each of the options

Forecast births 2015/2016	LEW	QEH	PRUH	STT	KCH	TOTAL
Option 1 (four sites)	0	5,798	5,691	7,099	7,308	25,896
Option 2 (five sites)	4,335	4,542	4,685	6,865	5,691	26,118

Key: LEW - University Hospital Lewisham; PRUH - Princess Royal University Hospital; QEH - Queen Elizabeth Hospital; STT - St Thomas' Hospital; KCH - King's College Hospital

113. Under option 1, dispersal of the forecast births amongst King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital was modelled based on travel times (data provided by Transport for London) and patient choice. Under option 1, a further 222 births in 2015/16 would be dispersed to providers outside of south east London.

114. In considering how a population might be affected by a change in services at a particular hospital site, provider Trusts supplied the TSA team with data about which Lower Super Output Area (LSOA)[3] the patients they currently treat come from. Any activity impacted was modelled from that LSOA and distributed to another hospital.

115. Based on the available data, the base scenario used in the modelling was to assume that any population affected by a change in hospital service provision would move to the hospital that could be reached in the shortest time.

116. When considering patient movements specifically for the Lewisham borough, Lewisham clinicians recommended that patient preference would mean that a higher proportion of patients would flow to central London hospitals than those hospitals suggested by objective travel times. This preference was therefore taken into account for non-blue light travel times and a weighted average taken for future patient flows for University Hospital Lewisham catchment population (this includes patients from boroughs other than Lewisham). These were developed based on conversations with the Chair of Lewisham CCG.

117. This methodology was applied to disperse University Hospital Lewisham births to the four sites (King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital). Under option 1, only patients that currently had a preference for University Hospital Lewisham were included in this calculation. An assumption was made that any patients who currently used central London hospitals such as St Thomas' or King's College Hospital from the London borough of Lewisham would be unaffected by the above changes and would continue to go there (figure 29).

[3] Explanatory note: Super Output Areas (SOAs) are a geographic hierarchy designed to improve the reporting of small area statistics. Within England and Wales a Lower Layer (minimum population 1000) and a Middle Layer (minimum population 5000) were introduced in 2004. Unlike electoral wards, these SOA layers are of consistent size across the country and won't be subjected to regular boundary change

Figure 29: Forecast births 2015/16 under option 1

Forecast births 2015/2016	LEW	QEH	PRUH	STT	KCH	TOTAL
Option 1 (four sites)	0	5,798	5,691	7,099	7,308	25,896

Key: LEW - University Hospital Lewisham; PRUH - Princess Royal University Hospital; QEH - Queen Elizabeth Hospital; STT - St Thomas' Hospital; KCH - King's College Hospital

118. The benefits and risks of both options were discussed by the external clinical panel at a meeting on 15 October 2012, where some reservations around the clinical sustainability of option two were raised. At a further meeting of the external clinical panel on 22 October 2012, no conclusion was reached and the panel recommended that further work was undertaken to examine each option in more detail.

119. It was recommended that further work was required on the detail of the two proposals so that a more thorough clinical assessment could be made; and that broader engagement in exploring these options should be sought through the consultation process.

Benefits, risks and mitigating actions of the options

120. Further development of the benefits, risks and mitigating options was undertaken by the clinical advisory group and through meetings with providers in south east London.

121. A maternity services workshop was held on 5 December 2012. The event was attended by approximately 40 individuals, comprising a mix of obstetricians, midwives, paediatricians, anaesthetists and intensivists from each of the five maternity units in south east London. Commissioner representatives from CCGs were also in attendance. The purpose of the workshop was to ensure that all benefits, risks and mitigating actions had been captured ahead of final consideration of the options by the external clinical panel.

122. The workshop sought clinical input into the assessment of the two options for the recommendation for maternity services in south east London. The clinical models for each of the two options were outlined to delegates and a facilitated session then took place on the benefits, risks and mitigating actions of each of the options; these were broken down into the following categories:

- Clinical
- Patient experience
- Operational
- Workforce

A summary of the benefits, risks and mitigating actions is provided in figure 30.

Figure 30: Summary of the benefits, risks and mitigating actions of each option

Clinical			
	Benefits	**Risks**	**Mitigating actions**
Option 1 (4 sites)	• All units to meet the London clinical quality standards • All units will be co-located with the supporting services of a 24/7 acute emergency admitting hospital	• Insufficient capacity planning, particularly at units closest to Lewisham may cause women to be re-directed resulting in increased babies born before arrival • Reduced resilience – lesser number of sites to deal with impact of service suspensions • Longer transfer times to an obstetric unit for home births • Poorer compliance with antenatal pathway with increased number of women not attending appointments • Increased safeguarding risks due to loss of relationships with local services	• Robust capacity and resilience planning with associated investment • Travel time analysis to ensure adequate access is maintained • Satellite/ outreach antenatal clinics provided by St Thomas' Hospital, King's College Hospital, Princess Royal University Hospital and Queen Elizabeth Hospital at University Hospital Lewisham site and/ or in the community to maintain local access where possible • Implementation of robust pathways in place for women between antenatal services at University Hospital Lewisham and the obstetric-led units with clear protocols for safeguarding
Option 2 (5 sites)	• All units to meet the London clinical quality standards • Shorter travel times for some if mother/baby needs to be transferred during a home birth • Improved resilience – higher number of sites to deal with impact of service suspensions	• Non co-location of supporting services of a 24/7 acute emergency admitting hospital • Unpredictability of true emergencies • Transfer of emergencies/ critically ill women to intensive level 3 care • Clinical viability of a small critical care unit providing high dependency care and short level 3 care	• Triage protocol to stream very high risk women to deliver at an alternative obstetric-led unit • Enhanced recovery model providing short term level 3 care, with transfer to a 24/7 acute emergency admitting hospital for patients requiring longer term level 3 care in a general intensive care unit
Patient experience			
	Benefits	**Risks**	**Mitigating actions**
Option 1 (4 sites)	• Services to meet London women's experience standards for labour, birth and immediate postnatal care	• Shortage of capacity, particularly at units closest to Lewisham, requiring mothers to re-directed to other units further away • Increased transfer time (if required) for home births requiring transfer to an obstetric-led unit • Increased travel times for some, resulting in potential reduction in visiting possibilities • Reduction in patient choice	• Robust capacity and resilience planning with associated investment • Travel time analysis to ensure adequate access is maintained • Choice of birth setting would be maintained
Option 2 (5 sites)	• Services to meet London women's experience standards for labour, birth and immediate postnatal care • Maternity unit closer to home • Convenience for local parents of attending outpatient appointments, antenatal classes, midwifery care at local GPs and delivering at a closer unit • Maintenance of pathways for hard to reach groups	• Unpredictability of true emergencies • Transfer of emergencies/ critically ill women to intensive level 3 care	• Triage protocol to stream very high risk women to deliver at alternative obstetric-led unit • Enhanced recovery model providing short term level 3 care, with transfer to a 24/7 acute emergency admitting hospital for patients requiring longer term level 3 care in a general intensive care unit

Operational			
	Benefits	**Risks**	**Mitigating actions**
Option 1 (4 sites)	• Consolidation of workforce may increase compliance of clinical quality standards – consultant presence and 1:1 midwifery care • Opportunity for midwifery case-loading	• Shortage of capacity and risk of service suspensions and increased red alerts • Underestimate of birth numbers in the model • May lead to additional capping • Number of deliveries through dispersal may reach tipping point for double rotas at some sites • Potential impracticalities of satellite antenatal clinics • Loss of pathways between local units and hard to reach groups • Disconnected community midwifery service and poorer links with primary care	• Robust capacity and resilience planning with associated investment • Local authorities and CCGs have verified birth projections. The highest projection of births has been used. Additional sensitivity analysis of birth forecasts in the model can be undertaken • Double rotas estimated at 8-10,000 births • Satellite/ outreach antenatal clinics provided by St Thomas' Hospital, King's College Hospital, Princess Royal University Hospital and Queen Elizabeth Hospital at University Hospital Lewisham site and/ or in the community to maintain local access where possible • Implementation of robust pathways and protocols in place for women between antenatal services at University Hospital Lewisham and the obstetric-led units
Option 2 (5 sites)	• Capacity in place • Antenatal clinics held on same site as women give birth (except very high risk women)	• Unsustainable rotas for supporting services	• Full retention of anaesthetic rota • Rotation of all staff across University Hospital Lewisham and Queen Elizabeth Hospital to ensure exposure to full casemix
Workforce			
	Benefits	**Risks**	**Mitigating actions**
Option 1 (4 sites)	• Exposure to a full range of case-mix at each unit • Supports education and training posts	• Anecdotal evidence suggests larger units produce poorer staff and patient satisfaction • Increased risks in a high risk population from disconnection of maternity units from local services - community midwives, health visitors and GPs • Additional 20 consultants required to provide 168 hour a week labour ward cover	• Comparison of unit size and Care Quality Commission women's satisfaction survey shows no correlation • Implementation of robust pathways and protocols in place for at risk women at the 4 providers
Option 2 (5 sites)	• Maintains relationships between maternity units local community midwives, health visitors and GPs	• Limited exposure to very high risk women at University Hospital Lewisham as these would be triaged out to other providers through the antenatal period • University Hospital Lewisham model may not support education and training posts • Additional 41 consultants required to provide 168 hour a week labour ward cover	• Rotation of all staff across University Hospital Lewisham and Queen Elizabeth Hospital to ensure exposure to full casemix

Consideration of the options by the external clinical panel

123. Following the workshop, a presentation of the clinical models for each of the options along with the feedback from the workshop was considered by the external clinical panel on 6 December 2012. The panel was expanded with extended membership to include obstetric and midwifery representatives, as well as representatives from the Royal College of Obstetricians and Gynaecologists and the Royal College of Midwives.

124. During this meeting, the clinical models were presented to the panel and the benefits, risks and potential mitigations were discussed. The major concern raised related to the level of critical care provision at University Hospital Lewisham and the sustainability of this model.

125. The disadvantage of four hospital sites providing obstetric-led services is the negative impact on some women on access and the capacity at remaining units in the face of additional demand. The disadvantage of five hospitals providing obstetric-led services is the increased clinical risk associated with the unit at University Hospital Lewisham – while it would have critical care facilities for women requiring high-dependency care; it was not proposed to have full intensive care facilities. The external clinical panel recognised that the need to transfer women to a facility with full intensive care facilities would happen infrequently; however, this is a risk that the external clinical panel was not willing to endorse, even for a small number of women. For this sole reason, the panel agreed that this model was not clinically sustainable and therefore that an obstetric unit at University Hospital Lewisham was not a viable option.

126. The panel's decision, endorsed by the representatives from the Royal College of Obstetricians and Gynaecologists and the Royal College of Midwives, was therefore to recommend to the TSA a configuration of four obstetric-led services.

127. At the time the TSA's draft report was published, a free-standing midwifery-led birthing unit was considered not to be financially viable as; generally, experience in London is that women do not choose to use them. However, during the consultation the focus sessions for maternity services users held at locations in Lewisham came out in support of maternity services being retained at the University Hospital Lewisham site, with participants particularly positive about the model of midwifery-led birthing units. This emerging view, as well as other consultation responses, prompted the TSA to suggest to the external clinical panel that it considered whether a free-standing midwifery-led unit could be made to work for University Hospital Lewisham.

128. The Royal College of Midwives representative and other members of the panel suggested that, in this case, it would likely to be an attractive choice for women due to the popularity of the current midwifery-led birthing unit at University Hospital Lewisham, which is rated highly in patient satisfaction surveys. Evidence of

successful free-standing midwifery-led birthing units elsewhere in the United Kingdom added further support to the external clinical panel's recommendation.

129. In summary therefore, it is recommended that four obstetric led units with co-located midwifery-led birthing units should be provided in south east London and a freestanding midwifery-led birthing unit be provided at University Hospital Lewisham. In making these recommendations, concerns raised regarding the capacity at the four recommended obstetric-led units have been addressed. Capital investment of £36m has been factored into transition costs to provide additional capacity; this includes the development of midwifery-led birthing units at Queen Elizabeth Hospital and King's College Hospital.

Financial analysis

130. The financial analysis was developed in parallel with the clinical options. There were three financial options considered:
    i) Obstetric and co-located midwifery-led services to be provided on four sites;
    ii) Obstetric and co-located midwifery-led services to be provided on five sites; and
    iii) Obstetric services to be provided on four sites with a free-standing midwifery-led unit at University Hospital Lewisham.

131. The financial analysis of each of the options was developed in parallel with the clinical consideration of the options. The full assumptions behind the development of these financial models are detailed in appendix M.

132. The comparative net present value (NPV) of each of the three options was calculated. The option with the lowest (least favourable) NPV was option 2 (. This was primarily because of the high recurrent cost of staffing five obstetric units that would achieve the London clinical quality standards for maternity services.

133. Substituting a free-standing midwifery-led unit at University Hospital Lewisham for an obstetric unit generated a NPV £18.4m higher than option 2. The increased benefit is primarily a result of avoiding the costs of staffing a fifth obstetric unit, although there are staffing costs for the free-standing midwifery-led unit at University Hospital Lewisham and some additional capital costs associated with increasing capacity at the four sites that would provide obstetric led services. The annual impact of the free-standing midwifery-led unit is to generate a cost pressure of c£1m for the University Hospital Lewisham site.

134. Option 1 generates a NPV £22.1m greater than option 2 and £3.7m more than the option of four sites with a free-standing midwifery-led unit on the University Hospital Lewisham site. The higher NPV is primarily driven by the avoidance of the costs associated with staffing a fifth obstetric unit and the free-standing midwifery-led unit is offset somewhat by additional capital costs associated with adding capacity at the four sites.

135. The financial impact of developing a free-standing midwifery-led unit at University Hospital Lewisham is relatively small when considered alongside the financial loss of option 2, other benefits and the strong clinical support for such a model from the external clinical panel. It is anticipated that local commissioners, in a direct response to the comments expressed by Lewisham residents as part of the consultation will respond by financially supporting the development, implementation and on-going financial shortfall which is projected at c£1m. This level of support has been assumed in the detailed financial modelling shown in appendix M.

Consultation responses

136. Overall, the responses from the consultation showed no clear support for either option for the recommendation for maternity services across south east London.

137. Significant support was received during consultation in favour of retaining the obstetric-led unit at University Hospital Lewisham from Lewisham GPs, consultants and Lewisham mothers. This message was reiterated through the focus group sessions held with service users in Lewisham.

138. However, the majority of free-text consultation responses emphasised the need for obstetric-led maternity services to be co-located on the same hospital site as a 24/7 acute emergency admitting hospital with concerns raised around providing obstetric-led services without an accident and emergency department on the same site. Therefore these consultation responses also endorsed the need for acute emergency and maternity services to meet the London Quality and Safety Programme clinical dependency framework (annex 2). This was further emphasised in the consultation response from King's Health Partners' clinicians, which outlined significant reservations about the option for a free-standing obstetric unit at University Hospital Lewisham if it did not have access to a co-located intensive care unit on site and the other support services of 24/7 acute emergency admitting hospital.

139. Additionally, the Royal College of Obstetricians and Gynaecologists stated in its response that 168 hours of consultant presence should be aspired to, to ensure that all women receive safe and effective care day and night regardless of unit size.

140. A response received from Greenwich and Lewisham National Childcare Trust suggested that the option of developing or retaining a free-standing midwifery-led unit on any site facing the closure of birthing services should be seriously considered, in order to allow as many women as possible to experience continuity of care when accessing antenatal, intrapartum and postnatal services. The response stated that such units can be successful when properly supported and invested in.

Health and Equalities Impact Assessment: maternity services

141. The HEIA raised that the final recommendation could improve maternity outcomes by concentrating obstetric-led maternity services onto fewer sites thereby enabling greater consultant presence. The report recognises that critical mass of deliveries could be achieved under the final recommendation, thus justifying 168-hours (24/7) consultant presence. While there is evidence to suggest concentrating obstetric units onto fewer sites is associated with positive health impacts, the report also states that this is by no means conclusive, and is an issue which is debated in the relevant literature[4].

142. The further mitigation suggested in the HEIA report regarding maternity health outcomes and patient experience are as per the final recommendation, that is, all obstetric units to have co-located midwifery led birthing units and all units to meet the full clinical quality standards developed for London. In particular, this will benefit women with high risk pregnancies.

143. For low risk births, there are also potential benefits in terms of health outcomes; midwife-led care is associated with improved experience for mothers and fewer interventions[5].

144. However, reduced maternity choice, access and continuity of care were raised as an issue, particularly in Lewisham. The reduction in choice, access and continuity was also identified as likely to impact the economically deprived, BAME groups and teenage mothers particularly in the area. As per emergency care, the entire socially and economically deprived population in south east London will continue to be within a reasonable journey time of a maternity unit, and will still have much better access to maternity units than many residents across England. Continuity of care must be carefully considered during implementation planning to ensure robust pathways and protocols exist across health and social care providers through the whole maternity pathway.

Recommendation

145. The TSA's recommendation for maternity services in south east London is that four hospital sites (King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital) should provide obstetric-led birthing services, with co-located midwifery-led birthing services. A free-standing midwifery-led birthing unit should be developed on the University Hospital Lewisham site.

[4] Macfarlane 2008
[5] Birthplace in England Collaborative Group 2011

Elective care

146. During the development of the draft recommendations, work was undertaken to review the options for elective surgery. The clinical advisory group concluded that the TSA should look at options for having one or two elective centres for non-complex inpatient cases serving the population of south east London. The clinical advisory group recommended that all sites should continue to deliver day case procedures and complex procedures should be provided at the four proposed 24/7 acute emergency admitting hospitals (St Thomas' Hospital, King's College Hospital, Princess Royal University Hospital and Queen Elizabeth Hospital, as well as being undertaken at Guy's Hospital) to ensure that the necessary clinical back up services are available, and specialist elective procedures should remain at Guy's Hospital, King's College Hospital and St Thomas' Hospital.

147. Establishing non-complex elective centres is possible by separating emergency care from planned care and thereby delivering improved, more efficient services, with a reduced risk of patients having their operations cancelled. The TSA concluded that the final decision should be made on the basis of the financial analysis.

148. In developing the final recommendation, the TSA worked with clinicians, providers, commissioners and external experts to determine the right case mix and optimal clinical model and to work up a proposal for the governance arrangements for the proposed elective centre at the University Hospital Lewisham site. An assessment of the financial implications of the elective centre was then undertaken.

149. The approach to agreeing the activity that would be suitable for the proposed elective centre was bottom up using 2011/12 activity data from Hospital Episode Statistics (HES) from hospitals across south east London. Clinicians from each hospital in south east London - nominated by clinical advisory group members - identified, at a procedure level, the activity that would be suitable to be undertaken in the proposed elective centre within the agreed parameters (i.e. non-complex procedures only, and day cases to remain at all sites). The information was aggregated and validated by a clinician independent of south east London.

150. A number of assumptions, agreed by the clinical advisory group and further endorsed by the external clinical panel and by an external elective expert panel, were then applied to the procedure analysis as follows:

    - *Complex cases*: As part of the procedure analysis, complex surgery was excluded; but some patients would also be unsuitable who require non-complex procedures but have other complexities such as co-morbidities. It was therefore agreed that all ASA (American Society of Anaesthesiologists) 1, 2 and 3 categorised patients would be suitable for treatment at the elective centre, but any patients categorised as ASA 4 or above would not be suitable for the elective centre and would continue to be treated at the proposed 24/7 acute emergency admitting sites (St Thomas' Hospital, King's College Hospital, the Princess Royal

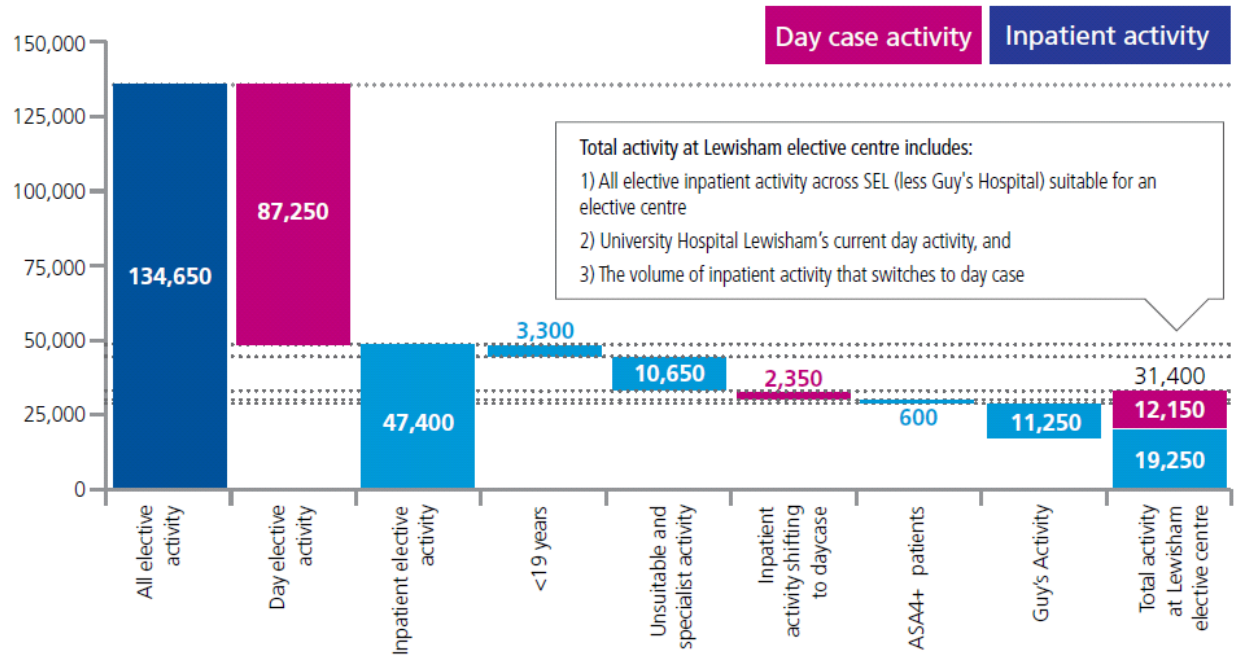
University Hospital and Queen Elizabeth Hospital). Based on a large European study undertaken in 2011, an assumption was applied that ASA4+ patients would account for 2% of all suitable elective activity[6].

- *Day case surgery*: To ensure the proposed elective centre is sustainable going forward, an assumption on the expected shift of current inpatient activity to day case activity was applied. This assumption was based on the difference between current inpatient procedures and British Association of Day Surgery recommendations. This assumption was agreed as an 8% shift of current inpatient surgery to day case surgery by 2015/16.
- *Paediatrics*: It was agreed that there would be no procedures undertaken on under 19 year olds at the proposed elective centre, due to the specific requirements for this group of patients.
- *Cancer patients:* It was agreed that cancer patients would not be excluded from treatment at the proposed elective centre. Cancer procedures currently undertaken at specialist cancer centres would remain there and it would only be procedures undertaken at local cancer units that would be suitable. This was included as part of the procedure analysis. The clinical advisory group and the external panels agreed with this approach, highlighting that it was important to ensure specific requirements for cancer patients would be available at the proposed elective centre.

The agreed activity for the elective centre is shown in figure 31.

[6] Pearse, R. M. et al (2012) Mortality after surgery in Europe: a 7 day cohort study The Lancet; 380: 1059-1065

Figure 31: Agreed activity for elective centre (procedures 2015/16)



Clinical infrastructure

151. The proposed clinical infrastructure required at the elective centre was based on: recommendations from the Royal College of Surgeons of England; learning from elective centres of excellence elsewhere in the United Kingdom; discussions with clinicians from south east London; and was further informed and endorsed by the clinical advisory group, external clinical panel and external elective expert panel. The proposed support services are defined as:

- Anaesthetics
- Radiology and access to pathology
- Pharmacy
- Post-operative care to (at least) critical care level 2
- Access to intensive care level 3 facilities, if required
- Resident medical cover (for post-operative management of complex surgery and routine surgery on patients with complex co-morbidities)
- Access to general medical opinion
- Therapy support, including physiotherapy and occupational therapy
- Relevant surgical services
- Operating theatre services

152. Extensive discussion and clinical challenge took place on the proposals for the clinical and workforce model for critical care provision at the elective centre. The agreed model shown in figure 32 was developed by intensivists from within south east London and external to south east London and subsequently endorsed by the clinical advisory group and the external clinical panel and external elective expert panel.

Figure 32: Proposal for critical care at the elective centre

	Critical Care Level 2 (2-4 beds)	Level 3 Support
Day (Monday - Saturday)	• 1 nurse for 2 patients (rotate through critical care) • 24-hour supervisory nurse • 24-hour critical care nurse for ward response • 8am-8pm consultant intensivist • 1 junior doctor per consultant	If Level 3 cars is required, this will initially be provided by the outreach nurse or supervising nurse
Night (Monday - Saturday	• 1 nurse for 2 patients (rotate through critical care) • 24-hour supervisory nurse • 24-hour critical care nurse for ward response • 8am-8pm resident intensivist middle grade • On call consultant intensivist	If prolonged level 3 is required, extra critical care nurses will be brought from Queen Elizabeth Hospital, or the patient will be transferred to Queen Elizabeth Hospital.
Sunday (24-hours)	• 1 nurse for 2 patients (rotate through critical care) • 24-hour supervisory nurse • 24-hour critical care nurse for ward response • 24-hour resident intensivist middle grade On call consultant intensivist	Transfer by outreach nurse and intensivist/ anaaesthetic middle grade or consultant doctor

153. The critical care unit at the elective centre will be led by a consultant intensivist and will provide a 24/7 response to the inpatient wards for deteriorating patients not currently on the unit. Patients that would be suitable for the unit would be those requiring high dependency care and, in addition, there would be the facility to provide short-term intensive care for those patients requiring ventilation before transferring to a critical care unit on a 24/7 acute admitting hospital site. The model meets the London clinical quality standards for critical care and the proposed staffing model would ensure flexibility to meet demands based on the acuity of patients on the unit.

154. The external clinical panel and external elective panel confirmed that the critical care model proposed was well established at the South West London Elective Orthopaedic Centre, safe and adequate for the activity proposed at the elective centre. It was concluded that the model of provision would minimise transfers to a critical care unit on a 24/7 acute emergency admitting hospital site.

Patient flow

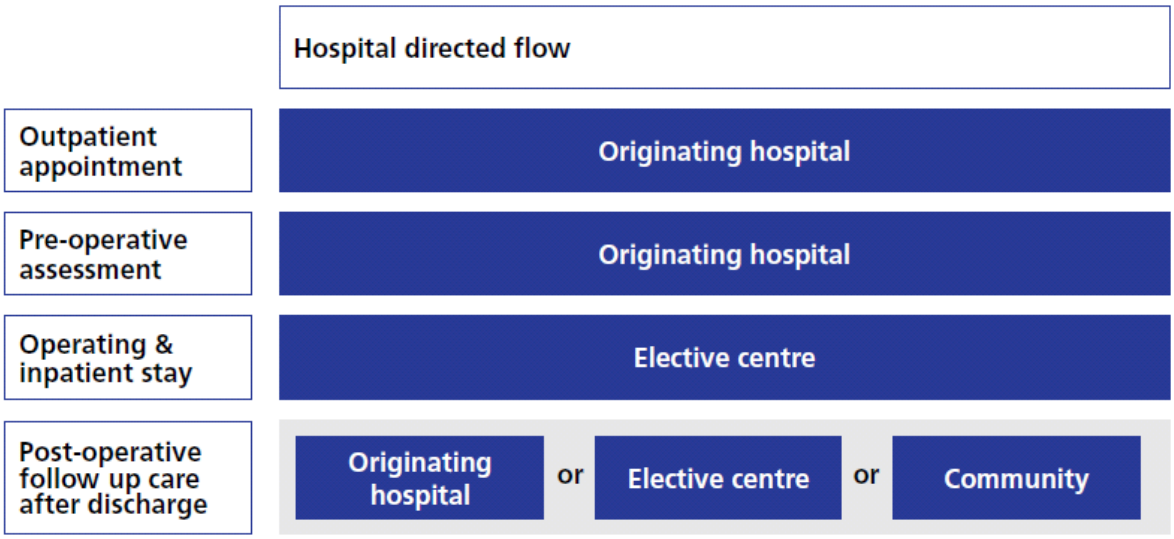
155. Individual meetings with each of the provider organisations in south east London took place to discuss the options for how patients would flow to the elective centre and the implications for the patient pathway. The options discussed for patient flow included direct referral from a GP to the elective centre; patient choice whereby the patient would choose to have their procedure carried out at the elective centre; patient flow directed by trusts; and individual surgeon choice. The preferred option was for trusts

to direct patients to be treated at the elective centre following the patients' outpatient appointments. This will ensure that outpatient appointments are retained locally and the flow of patients is then directed by the trust according to commissioning arrangements with the elective centre.

Patient pathway

156. Under the model of trust-directed flow, the full patient pathway and where activity is proposed to take place, is shown in figure 33.

Figure 33: Where patient activity will take place



157. Clinicians recommended that 'one-stop' clinics for outpatient and pre-operative assessment be developed at all originating hospitals to minimise the number of patient attendances at hospital and maximise patient convenience. Pre-operative assessment would need to be protocol driven across south east London providers in line with anaesthetic protocols at the elective centre.

158. Through discussions with clinicians and providers about the patient pathway, the importance of ensuring that all patients are on an enhanced recovery programme at the pre-operative assessment stage was highlighted. The benefits of the enhanced recovery programme in improving patient outcomes and speeding up a patient's recovery after surgery would make it critical to the clinical effectiveness and efficiency of the elective centre.

159. Discussions on post-operative follow up care concluded that this could take place in a range of settings – the originating hospital; the elective centre; or in a community setting – and by a range healthcare professionals, as clinically appropriate. As the proposed elective centre is implemented, this should be defined at a procedure pathway level with clinical commissioners to ensure it is in line with their Community Based Care Strategy.

Workforce model

160. A number of options for the workforce model at the elective centre were discussed with providers, the external clinical panel and external elective expert panel. These included a model where the elective centre employed no staff; instead clinical staff would be employed by the originating trusts, with non-clinical staff seconded from host organisations. A full employment model, with all staff employed by the elective centre, was also discussed. In the end a concession model emerged as the preferred approach, whereby non-clinical and core nursing staff would be employed by the elective centre and medical (surgeons and anaesthetists) and specialist nursing staff would be employed by their originating trust. This preferred approach is similar to the workforce model that is deployed at other elective centres and has been found to work well.

161. Following discussions with providers, the proposed patient pathway and preferred approach for the workforce model were presented to and endorsed by the TSA advisory group, clinical advisory group and external clinical panel, as well as the external elective expert panel.

Governance arrangements

162. Four alternative models for the management and accountability arrangements of the elective centre were considered by providers. The first model outlined that the proposed Queen Elizabeth Hospital and University Hospital Lewisham merged trust would manage the elective centre, reporting to its own trust board with contractual relationships with other trusts. The second option was for the elective centre to be managed by the proposed Queen Elizabeth Hospital and University Hospital Lewisham merged trust, but it would be accountable to a partnership board on quality and access issues and originating trusts would retain accountability for meeting access targets. Third, an independent management model was considered, which proposed that the elective centre was independently managed, with independent quality control and lines of accountability to the proposed Queen Elizabeth Hospital and University Hospital Lewisham merged trust. Finally, a shared arrangement, with hosting rotated between trusts to provide independence, was considered.

163. The first option outlined above would have a straightforward management structure with clear accountabilities, but it lacked ownership and engagement from provider organisations across south east London. Other options were viewed as unnecessarily complex. The preferred option was therefore for a robust partnership board to be established, with each trust represented on it.

164. The partnership board would oversee the management of the elective centre and the centre would be accountable to the partnership board for quality and access. Advice from the external elective expert panel during the development of the recommendation was that the establishment of a partnership board with clear responsibilities and accountabilities of all partner provider organisations is critical to

the success of the elective centre. In discussions with providers, it was clear that within this arrangement each originating trust would prefer to retain the reporting arrangements and accountability of 18 week referral to treatment access targets for admitted patients.

165. A clear clinical governance framework would be established at the outset, overseen by the partnership board. It is recommended that a medical director and a nursing director for the elective centre are appointed to offer clear clinical leadership. Concerns were raised by the clinical advisory group regarding individual clinical accountability. As part of the development of the clinical governance framework during the implementation stage, these concerns will be addressed.

166. Following discussions with providers, the preferred option for governance arrangements was presented to and endorsed by the TSA advisory group, clinical advisory group and external clinical panel, as well as the external elective expert panel.

Financial analysis

167. The forecast activity was developed by clinicians. Clinicians on the clinical advisory group also developed the productivity assumptions as follows.

168. The assumption for operating productivity was for 12-hour operating days, 6 days a week, utilising nine theatres. This was, as per other assumptions, agreed by the clinical advisory group and endorsed by the external panels, although the external elective expert panel advised that it would seem sensible from a productivity point of view to move towards operating 7 days a week, thereby reducing theatre and bed requirements in the future.

169. Elective centre activity modelling indicates that an estimated 19,250 procedures would be undertaken each year, which would require 112 beds – three of which would need to be high dependency beds – and a total of nine operating theatres for inpatient surgery and three theatres for day cases.

170. The estates configuration proposed on the University Hospital Lewisham site for the development of the elective centre was challenged in response to the TSA's consultation. One option put forward would have seen the retention of "A" and "F" blocks at the hospital, in addition to the proposed estate configuration set out in the draft report. While this option could save capital redevelopment costs, the associated increase in fixed costs over those included in the TSA's proposals risks make the site financially unviable.

171. The issue of excess capacity and associated excess estates cost is one that is recognised throughout south east London. The need to reduce these costs and increase estate utilisation is key to the overall development of increased operational efficiency and, through this, the financial viability for all organisations. While it is an

attractive option to retain buildings, this is often at an inappropriate financial cost, resulting in a disproportionate drain on the financial resources of the organisation.

172. The fixed costs savings at the University Hospital Lewisham site has been estimated at £22.6m (gross before re-investment), or £12m excluding depreciation, public dividend capital (PDC) and interest. The TSA's proposals would see an allowance for a further £7m of similar annual fixed costs to reflect the investment in the site. The TSA's proposals see around 60% of the total estate (gross internal floor area) of the University Hospital Lewisham site disposed of and a net reduction in fixed costs of around 34%.

173. During consultation a number of specific elements of the fixed costs at the University Hospital Lewisham site were highlighted as potentially being difficult to achieve in the short to medium term, because of current contractual arrangements. The financial due diligence conducted into the financial viability of the overall recommendations has identified some areas of financial risk while also recognising the potential for clear mitigations in certain areas and the opportunities for further financial benefits in others.

174. The changes in the balance and nature of services delivered from the Lewisham site, the increasing integration with local community services and the other providers in south east London should provide further opportunities to mitigate fixed cost pressures. Due to the statutory time requirements of the Unsustainable Provider Regime and the desire to ensure that the most appropriate clinical solution was developed, it has not been possible to establish a fully detailed operational financial model for the elective centre. This is appropriate, since it will be for the proposed partnership board, responsible for the delivery of safe clinical services at the centre, to agree and develop detailed operational budgets. The financial case developed for the TSA demonstrates that such a centre is financially viable and contributes to ensuring the financial viability of all provider organisations. Figure 34 illustrates the financial impact of the elective centre contained in the detailed financial modelling, highlighting the financial impact of the changes since the draft report.

Figure 34: Elective centre financial impact

Elective Centre Financial Impact		
£m	**Pre-consultation**	**Post-consultation**
Inpatient Surgery		
Income	67.4	54.9
Variable costs	19.1	15.7
Semi-variable costs	34.1	27.9
Critical Care	2.8	2.8
Operating margin	**11.4**	**8.5**
Daycase Surgery		
Income	13.8	14.2
Variable costs	1.7	1.8
Semi-variable costs	6.6	6.9
Critical Care	0	0
Operating margin	**5.5**	**5.5**
Total Elective Centre		
Income	81.2	69.1
Variable costs	20.8	17.5
Semi-variable costs	40.7	34.8
Critical Care	2.8	2.8
Operating margin	**16.9**	**14.0**

175. The business case necessary to support the c£55.9m capital investment to develop the elective centre at University Hospital Lewisham will need to fully consider all of the estate options, to ensure overall value for money is obtained for this significant investment of taxpayers' money. The business case will also need to move from residual costing to a bottom up appraisal of the lean operating costs of services, should the recommendation be agreed by Secretary of State.

Consultation responses

176. Commissioner and provider support for the proposed elective centre of excellence at University Hospital Lewisham was tested during the development of the final recommendations. Commissioners were largely in favour of the development of the elective centre; this was mainly re-stated in their responses to the consultation. In its consultation response, Lewisham CCG noted that the success of the centre was dependent on other Trusts in south east London referring to the centre.

177. With strong commissioner support this risk is, in part, mitigated. It can be further mitigated by provider support, which was articulated by some during consultation in terms of the benefits the centre could bring by splitting emergency and elective services; however, the detail of the clinical and business model needed to be developed further in planning for implementation to provide further assurance to provider Trusts.

Health and Equalities Impact Assessment

178. The HEIA highlighted that patients could benefit from the centralisation of non-complex elective procedures, both in terms of health outcomes and patient experience. For example, benefits that could result from the separation of elective and emergency care include the reduction and elimination of hospital-acquired infections and a reduction of cancellations in procedures.

179. The HEIA also outlined that travel times and cost will increase for many patients previously attending University Hospital Lewisham for complex elective inpatient procedures, given the proposal is that those procedures would no longer be provided there. At the same time, the consolidation of non-complex inpatient elective services into the proposed centre at University Hospital Lewisham will lead to an increase in travel times for some patients to receive treatment. This could particularly impact people with disabilities, economically and socially deprived and older people. Furthermore, people supporting patients, such as carers and relatives, could also be impacted. However, public transport access to University Hospital Lewisham is rated as 'very good' by the Transport for London Public Transport Accessibility Level (PTAL) score; conversely, public transport access to Princess Royal University Hospital and Queen Mary's Hospital is rated as 'poor'.

180. Given that older people and people with disabilities may rely on their relatives and carers to transport them to hospital, there may be an adverse impact on these individuals. Pre- and post-surgery appointments will continue to take place close to patients' homes, so any increased journey time is only likely to be for the operation itself. Additionally, for non-complex elective inpatient admissions at University Hospital Lewisham, patients, their relatives and carers may benefit from the proposed development of a new car park. The new car park will potentially improve accessibility and could enhance patient experience by encouraging the involvement of the patient's family and friends.

181. In relation to the change in services, the HEIA states that it may be more difficult for some people from BAME groups to understand the changes in service provision and where they need to go to access a particular service. This is important given that patients may be travelling to different locations at different stages in the elective care pathway. It is therefore important that patients, their relatives and carers receive clear information along the care pathway.

Recommendation

182. With this in mind and considering feedback from the consultation period and the HEIA, options for the development of one or more dedicated elective centres for the population of south east London were considered by all of the advisory groups in order to assess both the clinical and financial benefits of the options. Based on these considerations the TSA's recommendation is for an elective centre for non-complex inpatient procedures to be developed at University Hospital Lewisham and for non-

complex inpatient procedures to continue to be provided at Guy's Hospital, together serving the whole population of south east London. Alongside this, complex procedures should be provided at King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital; and specialist procedures should continue to be provided at Guy's Hospital, King's College Hospital and St Thomas' Hospital. Day case procedures would continue to be provided at all seven main hospitals.

Summary of recommendations

183. This appendix sets out the process for developing the draft recommendations for service change across south east London, is the work and analysis that was undertaken during consultation on the draft recommendations, and the consultation responses. An assessment of the impact of the recommendations on health and equalities has also been considered.

184. With regard to urgent and emergency care, the recommendation is to develop 24/7 acute emergency admitting hospitals at King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital. Services at University Hospital Lewisham, Guy's Hospital and Queen Mary's Hospital Sidcup should provide urgent care for those that do not need to be admitted to hospital. Emergency care for those patients suffering from a major trauma (provided at King's College Hospital), stroke (provided at King's College Hospital and the Princess Royal University Hospital), heart attack (provided at St Thomas' Hospital and King's College Hospital) and vascular problems (provided at St Thomas' Hospital) will not change from the current arrangements.

185. For maternity services, the recommendation is for King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital to provide obstetric-led birthing services, with co-located midwifery-led birthing services. A free-standing midwifery-led birthing unit should be developed on the University Hospital Lewisham site.

186. With regard to elective care, the TSA's recommendation is for an elective centre for non-complex inpatient procedures to be developed at University Hospital Lewisham and for non-complex inpatient procedures to continue to be provided at Guy's Hospital, together serving the whole population of south east London. Alongside this, complex procedures should be provided at King's College Hospital, Princess Royal University Hospital, Queen Elizabeth Hospital and St Thomas' Hospital; and specialist procedures should continue to be provided at Guy's Hospital, King's College Hospital and St Thomas' Hospital. Day case procedures would continue to be provided at all seven main hospitals.

Annex 1: Benefits of implementing the community based care aspirations, London clinical quality standards and elective centre across south east London

Community Based Care		
Issue	**Evidence**	**Impact**
Ageing and growing population	The overall population of south east London is forecast to grow by 6% in the next five years[i]	Investment in community based services planned to address issues[iv]
Significant health inequalities in part due to a lack of good preventative and primary care access	3.5 years difference in life expectancy between Greenwich and Bromley[ii]	37 heart attacks and strokes could be prevented each year through early detection of risk factors with improved use of NHS Health Checks[ix]
Increasing number of people living with long terms conditions which are not managed effectively	More than 1 in 4 people aged 75+ have one or more of the major long term conditions[iii]	700 lives could be saved each year through early detection and improved management of diabetes alone[x]
High rates of uncontrolled diabetes	Up to 27% of people with diabetes remain undiagnosed and 53% of those diagnosed do not have their condition controlled and therefore have a higher risk of exacerbation, amputation, stroke and other complications	The number of people with uncontrolled diabetes should be reduced by half[xi] Around 200 amputations a year could be avoided through improved diabetes management in the community[xii]
Variation in access to and quality of community based care	10% of admissions for older people could have been managed through better community based care[iv] 41% of patients do not feel they are supported enough by local services to manage their long term conditions[v]	10% reduction in emergency admissions for older people with long term conditions managed effectively in community care[iv] 85% of patients to feel supported to manage their long term conditions[xiii]
Insufficient access in primary care for urgent same-day or out-of-hours services	20% of patients do not believe that GP surgeries are open at convenient times[v]	6% reduction in A&E attendances[xiv]
High A&E attendance rates across hospitals Unnecessary admissions to hospital care	3 of the 6 boroughs are below the national average for out of hours access to primary care[vi] 44% of all emergency activity is coded as minor and could potentially have been dealt with in the community[vii]	Improvement in % of respondents to annual GP patient survey that are very or fairly satisfied with GP opening hours by 2015/16
End of life care is not always available in the patient's preferred place of death - too may people die in hospital which is not their preference	A local Coordinate My Care (CMC) pilot survey indicates that 82% of people would prefer to die at home. In 2010, just 20% of residents who died, died at home[viii]	A significant increase in the number of patients that will be supported to die in their preferred place of death by 2015/16[iv]

Emergency Care

Issue	Evidence	Impact
Variation in mortality rates across hospitals particularly between weekdays and weekends	HSMR across trusts varies from 80.5 – 97[xviii]	Around 250 fewer observed deaths every year if all trusts reached HSMR level of lowest in sector[xviii]
Inconsistent service arrangements between hospitals and within hospitals, between weekdays and weekends.	10% higher mortality rate for weekend acute emergency admissions[xix]	Around 100 lives could be saved every year if mortality rates at weekends were consistent with weekday mortality rates[xix]
Variation in senior doctor presence across emergency – adult and paediatric – services	Consultant cover for acute emergency admissions at the weekend is half of what it is during the week[xx]	
Variation in the availability of experienced and skilled senior staff	Only 88% of consultant surgeons are laparascopically (key hole) trained[vii]	Potential decrease in mortality and morbidity if patients were treated laparoscopically by specialist surgeons[xxii]
Inability to meet London minimum clinical quality standards for emergency – adults and paediatrics – care	Significant shortfall of consultants to achieve minimum standards of acute emergency care across all hospitals[vii]: • Shortfall of approximately 21 WTE emergency medicine consultants to achieve standards at all sites • Shortfall of approximately 8 WTE emergency surgery consultants to achieve standards at all sites • Shortfall of approximately 9 WTE paediatric consultants to achieve standards at all sites	Decrease in unnecessary paediatric admissions to hospital if there was increased senior decision making available[xxiii]

Maternity Care

Issue	Evidence	Impact
Inability to meet Royal College of Obstetricians and Gynaecologists' standards for consultant labour ward presence across all hospitals A skilled and competent workforce is essential to deliver a safe and high quality maternity service for all women and their babies yet there is variation in the level of consultant labour ward cover	Currently labour ward cover by consultants in maternity units ranges from 60 hours per week to 94 hours per week[xvi]	168 hours (24/7) consultant labour ward presence reduces risk to mothers and babies and improves outcomes[xvii]

Elective Care		
Issue	**Evidence**	**Impact**
High cancellation rates and delays for elective procedures - due to non-clinical reasons - associated with the insufficient separation of planned and unplanned care	In 2011/12 1,250 elective procedures were cancelled at the last minute for non-clinical reasons[vii] Waiting times for elective procedures did not consistently meet NHS constitution in 2011/12 in all but one hospital	No last minute cancellations for non-clinical reasons due to separation of elective and emergency activity[xv] A reduction in waiting times, meeting pledge to patients in NHS constitution

Sources:

1. ONS Interim mid 2011based Sub-national population projections
2. London Health Inequalities Network
3. Estimated from HES 2010/11; QOF 2010/11; ONS 2011
4. SEL Cluster “Simple Operating Models”; TSA Commissioning forecast model, team estimates, CCG working groups
5. Greater London Authority, myhealthlondon indicator
6. GP Patient Survey July-September 2011
7. Trust data submissions
8. National End of Life Care Programme Intelligence Network
9. NHS Choices
10. NAO 2012 “Management of Adult diabetes service in the NHS”0
11. National Audit Office report, 2012; Clement, Kyle, Tierney, Tierney (2010), South central Foundation: The SCF Nuka Model of Care—Customer-Owners Driving Healthcare
12. Diabetologia 2012
13. South East London Commissioning Strategy Plan
14. CBC working group planning assumptions, TSA reconfiguration model
15. Based on Gateway Elective Centre in north east London
16. Local Supervising Authorities of London
17. Royal College of Obstetricians and Gynaecologists
18. Dr Foster
19. London Health Programmes (2011) Adult emergency services: case for change
20. Survey of London acute trusts (2011)
21. Dr Foster
22. Royal College of Surgeons of England
23. Royal College of Paediatrics and Child Health

Annex 2: Clinical dependencies