

PROVISION OF EMERGENCY GENERAL SURGERY IN SOUTHERN HEALTH AND SOCIAL CARE TRUST OPTION APPRAISAL



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1.0 Introduction

This document sets out a non-financial option appraisal on the proposed future delivery of Emergency General Surgery for the population of the Southern Health and Social Care Trust.

The appraisal will identify a list of assessment options aimed at identifying a preferred option.

2.0 Option Appraisal

2.1 Preferred Service Model

This option appraisal is a key element in facilitating decision making and forward planning with regards to the future provision of emergency general surgery within the Southern Trust.

2.2 Benefit Appraisal

The benefit appraisal is a process of quantifying and comparing the potential benefits of the options in terms of non-financial criteria. Benefit criteria are used to select and evaluate the possible options and to determine the preferred option.

2.2.1 Benefit Criteria

Benefit criteria are used to select and evaluate the options that have the potential to meet the specific project objectives. Although cost is an important evaluative determinant, it represents only one of a number of issues, which will impact on the value to be provided from that particular option. In addition, it is the case that not all costs or benefits can be measured in monetary terms, as no market value exists for them.

2.2.2 Non-Financial Benefit Criteria

Detailed below are a list of benefits and their descriptors which will be used to both shortlist and score the options. The benefits and descriptors are directly linked back to the Standards for Emergency and Elective General Surgery as a regionally endorsed benchmark for delivery of services.

Table 2-1- Benefit Criteria

Benefit Criteria	Description of Criteria
Model of Emergency Surgical Care	<p>The provision of Emergency General Surgery Services that are safe, secure and effective and ensure quality assessment, treatment and care for all patients is the most important factor for consideration.</p> <p>It is important that the options align with the Regional and Trust strategic direction for Emergency General Surgery and have the flexibility to respond to future changes in service provision.</p> <p>Options which incorporate the following will score higher:</p> <ul style="list-style-type: none"> • Separation of emergency and elective general surgery pathways in terms of teams, time and facilities • Consultant surgeons covering emergencies must not cover, nor be expected to be in attendance on more than one site • Assessment and Ambulatory Care Pathways with access for GPs and speciality advice • Seen by the appropriate specialty in a timely manner • Clear pathways for access for emergency general surgery team for advice, assessment and transfer of patients
Clinical Infrastructure	<p>The assessment of this criterion will focus on the ability of each option to:</p> <ul style="list-style-type: none"> • Provide the capacity and environment that satisfies the existing and projected demand for Emergency General Surgery attendances and admissions. Standards for Emergency and Elective General Surgery state that the hospital must have access to critical care services including access to level 3 and level 2 care beds and a critical outreach team (As per Critical Care Network Northern Ireland Register). • Provision of an emergency surgery theatre must be available 24 hours per day 7 days per week • Bed Capacity – Impacts on bed availability on both acute sites for both surgery and medicine. Based on a detailed bed modelling exercise Trust has identified a need for 98 surgical beds to deliver the general surgery service to the Southern Trust population.
Clinical Interdependencies	<p>The assessment of this criterion will focus on the ability of each option to provide:</p>

Benefit Criteria	Description of Criteria
	<ul style="list-style-type: none"> • Access to radiology diagnostic services 24 hours per day 7 days per week. To include plain film x-ray, CT, MRI and ultrasound • Access to radiology interventional services 5-7 days per week to include drainage and more complex IR procedures • Access to laboratory services • Access to bleeding rota for gastroenterology services • Provision for Paediatrics • Support from other clinical specialties to include cardiology, renal, diabetes and care of the elderly
Surgical Workforce	<p>A key corporate objective of the Trust focuses on ‘making the best use of resources’.</p> <p>The scoring of options should reflect the following:</p> <ul style="list-style-type: none"> • Optimise the staffing resource across general surgery to support the delivery of emergency care • Consideration of impact on other specialties • Consideration of impact on the wider health and social care system including other HSC Trusts and the Northern Ireland Ambulance Service (NIAS) in delivering the service model • Stability of workforce and less dependence on locum staff which may reduce governance issues as per standards – consultant rotas must be sufficient size with the majority of posts occupied by substantive post holders • Improve the Trust’s ability to recruit and retain adequate consultant staff to deliver the service model. • Options which provide a service model that offers access to all surgical specialities for all junior doctor trainees and the ability to receive mentorship in these areas will score higher.
Implementation	<p>The assessment of this criterion will focus on:</p> <ul style="list-style-type: none"> • Those options that can be implemented in a timely manner to achieve changes more quickly will score higher. This may be for reasons such as minimal resource investment, capacity, service requirements, Estates works or time factors. • Time, and budget. This criterion relates to the process and the timescales involved in securing capital and revenue funding to support the service model.

2.3 Options

2.3.1 Long List of Options

The following long list of options considers potential scenarios for the provision of emergency general surgery service at the Southern Trust that would potentially mitigate safety and sustainability issues.

Table 2-2 – Description of Options

Option Number	Description of Option
1.	<p>Status Quo – Single Site Model - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital – No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Craigavon Area Hospital • Ongoing Surgical Assessment and Ambulatory Services provided at Craigavon Area Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
2.	<p>Reinstate two site model - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital & Daisy Hill Hospital</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to both acute hospitals • Surgical Assessment and Ambulatory provided on both acute sites • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
3.	<p>Two Site Model - Secure cover from consultants from other Trusts - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital and Daisy Hill Hospital</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to both acute hospitals • Surgical Assessment and Ambulatory provided on both acute sites • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital

Option Number	Description of Option
4.	<p>Single site Model Daisy Hill Hospital - 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Daisy Hill Hospital • Ongoing Surgical Assessment and Ambulatory provided at Daisy Hill Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
5.	<p>Two site Model with 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital and Daisy Hill Hospital ‘in-hours’ between 8am and 6pm</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • Emergency General Surgical Team assess patients in Craigavon Area Hospital Emergency Department 24 hours per day 7 days per week and patients in Daisy Hill Hospital Emergency Department between 8am and 6pm • All emergency surgical admissions to Craigavon Area Hospital • After 6pm revert to Single-Site Model as detailed in option one • Surgical Assessment and Ambulatory will be provided in Craigavon Area Hospital and restricted/reduced hours in Daisy Hill Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
6.	<p>Two site model - Emergency surgery Service – Craigavon Area Hospital site 24 hours per day 7 days per week and contracted agreement with cross border hospital</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Craigavon Area Hospital • Admissions to and from cross border hospital • Surgical Assessment and Ambulatory will be provided at Craigavon Area Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
7.	<p>Single site model - Development of new surgical centre on a site central for the population of the Southern Trust</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients present at the new central Emergency Department

Option Number	Description of Option
	<ul style="list-style-type: none"> • All emergency surgical patients admitted to new hospital • Surgical Assessment and Ambulatory provided at new hospital • Elective Surgery will be provided at the new hospital
8.	<p>Single site Model Craigavon Area Hospital site - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Craigavon Area Hospital • Ongoing Surgical Assessment and Ambulatory provided at Craigavon Area Hospital • Elective Surgery will continue to be provided at Daisy Hill Hospital, Craigavon Area Hospital and South Tyrone Hospital

2.3.2 Impact Statement Exercise

The following long list of options have been evaluated against the selected benefit criteria and those options that do not meet the criteria have been discounted. Each of the options is considered on the current infrastructure of each site, current staffing and clinical interdependencies.

A rationale for the discounted options is detailed in Table 3.3 below.

✓✓✓ - Fully addresses benefit criteria

✓✓ - Meets most benefit criteria

✓ - Partially meets benefit criteria

X – Does not meet benefit criteria

Table 2-3 – Impact Statement Exercise

	Option 1 Status Quo – Single site Model - CAH	Option 2 – Reinstate two site model	Option 3 – consultant cover from other Trusts	Option 4 Single site model in DHH	Option 5 – reduce hours in DHH	Option 6 – Cross Border contract	Option 7 – Development of new hospital	Option 8 Single site model CAH- Compliance with standards
Benefit Criteria								
Model of Emergency Surgical Care	✓✓	x	x	✓	✓	✓	✓✓✓	✓✓✓
Clinical Infrastructure	✓✓✓	x	x	✓	x	✓	✓✓✓	✓✓✓
Clinical Interdependencies	✓✓✓	✓	✓	✓	✓	✓	✓✓✓	✓✓✓
Surgical Workforce	✓✓✓	x	x	✓✓	x	✓	✓✓✓	✓✓✓
Ease of Implementation	✓✓✓	x	x	✓	✓	x	x	✓✓✓

2.3.3 Discounted Options

The Project Team considered the range of options. It was agreed that the following options would be discounted.

The following table explains the rationale for the discounted options.

Table 2-4 – Discounted Options

Option Number	Option Description	Discounted Rationale
<p>Option 2</p>	<p>Reinstate two site model - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital & Daisy Hill Hospital</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency Surgical admissions to both acute hospitals • Surgical Assessment and Ambulatory provided on both acute sites • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital 	<ul style="list-style-type: none"> • Within the regional emergency general surgery standards, there is a recommendation that Consultant surgeons, covering emergencies must not cover, nor be expected to be in attendance on more than one site. The Trust consultant posts continue to reduce aligned to overall changes in specialisation. This has resulted in difficulties in recruitment and retention within the Trust and within Northern Ireland as the ‘general’ surgical skill is reduced. The Trust would be required to have in place a surgical team on both acute sites, which is not feasible. • The standards also state that consultant rotas must be of sufficient size with the majority of posts being held by substantive post holders. • Trainees must be provided with the required support and mentorship. This option is not sustainable, and could only ever be a short-term solution due to regional workforce constraints.
<p>Option 3</p>	<p>Two Site Model - Secure cover from consultants from other Trusts - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital and Daisy Hill Hospital</p>	<ul style="list-style-type: none"> • Within the regional emergency general surgery standards, there is a recommendation that Consultant surgeons, covering emergencies must not cover, nor be expected to be in attendance on more than one site. The Trust consultant posts

Option Number	Option Description	Discounted Rationale
	<ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency Surgical admissions to both acute hospitals • Surgical Assessment and Ambulatory provided on both acute sites • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital 	<p>continue to reduce aligned to overall changes in specialisation. This has resulted in difficulties in recruitment and retention within the Trust and within Northern Ireland as the 'general' surgical skill is reduced. The Trust would be required to have in place a surgical team on both acute sites, which is not feasible.</p> <ul style="list-style-type: none"> • The standards also state that consultant rotas must be of sufficient size with the majority of posts being held by substantive post holders. • Trainees must be provided with the required support and mentorship. This option is not sustainable, and could only ever be a short-term solution due to regional workforce constraints. • This option to secure consultants from other Trusts has been tested by other Trusts and shown not to work or be a reliable solution. • There would be poor continuity of care for patients. Surgeons from other Trusts' would provide cover for rotas on both sites. There would be a level of inconsistency with this option as staff availability would vary. • This option does not allow a Team Based approach to patient care as rotational cover would be provided from Consultants in other Trusts. This would not provide continuity of care and would make day-to-day communication and sub-speciality skill mix difficult as well as hindering the need to develop a Southern Trust general surgery team. • This option is unlikely to be stable as a consultant from another Trust may be required to withdraw from the rota at short notice due to absences within their own Trust.

Option Number	Option Description	Discounted Rationale
		<ul style="list-style-type: none"> • There is currently a shortage of general consultant surgeons throughout the region and other Trusts are also struggling to recruit to their rotas. Similar to the Southern Trust the Western and the Northern Trusts are currently preparing to publically consult on the provision of general surgery services. Each Trust is at a different stage of this process.
<p>Option 5</p>	<p>Two site Model with 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital and Daisy Hill Hospital ‘in-hours’ between 8am and 6pm</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • Emergency General Surgical Team assess patients in Craigavon Area Hospital Emergency Department 24 hours per day 7 days per week and patients in Daisy Hill Hospital Emergency Department between 8am and 6pm • All emergency surgical admissions to Craigavon Area Hospital • After 6pm revert to Single-Site Model as detailed in option one • Surgical Assessment and Ambulatory will be provided in Craigavon Area Hospital and restricted/reduced hours in Daisy Hill Hospital 	<ul style="list-style-type: none"> • Within the general surgery standards if an acute site provides emergency surgery it must be delivered by a 24 hours per day 7 days per week emergency surgical team, consultant led. • Insufficient current staffing to cover emergency rota on two acute sites, even with one site operating a reduced hours service. • Confusion for patients/staff/carers in respect of interim services • Transfers would still be required between hospitals for inpatients placing additional pressure on NIAS and private transfer arrangements • Impact on patient safety out of hours due to the requirement to transfer patients and the level of staffing available.

Option Number	Option Description	Discounted Rationale
	<ul style="list-style-type: none"> • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital 	
Option 6	<p>Two site model - Emergency surgery Service – Craigavon Area Hospital site 24 hours per day 7 days per week and contracted agreement with cross border hospital</p> <ul style="list-style-type: none"> • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Craigavon Area Hospital • Admissions to and from cross border hospital • Surgical Assessment and Ambulatory will be provided at Craigavon Area Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital 	<ul style="list-style-type: none"> • This option was originally short listed however after further consideration by the Clinical Sub-group it was felt that there were too many unknowns regarding this option to score fairly. There are a number of areas which need to be explored including the implications of Brexit and the NI protocol. Developing any cross-border health service proposals would require political agreement in both jurisdictions. There would also need to be detailed joint policy work developed involving officials from both sides of the border. This is a highly complex process and would require significant time and resources. There are also wider implications for stakeholders and partners including NIAS.
Option 7	<p>Single site model - Development of new surgical centre on a site central for the population of the Southern Trust</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients present at the new central Emergency Department • All emergency surgical patients admitted to new hospital 	<ul style="list-style-type: none"> • As part of the Trust’s 10 year capital priorities, Craigavon Area Hospital site and Daisy Hill Hospital have been identified as priorities for redevelopment on existing sites. A change in direction to develop a new hospital in a central location would impact on plans submitted to DoH for redevelopment of Craigavon Area Hospital site and Daisy Hill Hospital sites. Regional capital funding allocations are currently constrained and unlikely to deliver such a development in the near future. • The timescales for this option are unrealistic – a strategic outline case would be required to be developed to be submitted to the DoH for approval to develop an outline

Option Number	Option Description	Discounted Rationale
	<ul style="list-style-type: none"> • Surgical Assessment and Ambulatory provided at new hospital • Elective Surgery will be provided at the new hospital 	<p>business case to seek capital funding. A site would be required to be identified and purchased in an area acceptable to the population of the southern Trust. An Equality Impact Assessment would be required around accessibility and acceptability for the SHSCT population</p>

2.4 Short list of Options

The following table details the short list of options.

Table 2-5 – Short List of Options

Option Number	Description of Option
1	<p>Status Quo – Single Site Model - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital – No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance</p> <p>Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department</p> <ul style="list-style-type: none"> • All emergency surgical admissions to Craigavon Area Hospital • Ongoing Surgical Assessment and Ambulatory Services provided at Craigavon Area Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
4	<p>Single site Model Daisy Hill Hospital - 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Daisy Hill Hospital • Ongoing Surgical Assessment and Ambulatory provided at Daisy Hill Hospital • Elective Surgery will continue at Craigavon Area Hospital, Daisy Hill Hospital and South Tyrone Hospital
8	<p>Single site Model Craigavon Area Hospital site - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital</p> <ul style="list-style-type: none"> • Full implementation of the Emergency General Surgery Standards to achieve full compliance • Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department • All emergency surgical admissions to Craigavon Area Hospital • Ongoing Surgical Assessment and Ambulatory provided at Craigavon Area Hospital • Elective Surgery will continue to be provided at Daisy Hill Hospital, Craigavon Area Hospital and South Tyrone Hospital

2.5 Scoring of Options

As stated above the benefit appraisal is a process of quantifying and comparing the potential benefits of the options in terms of non-financial criteria. Benefit criteria are used to select and evaluate the possible options and to determine the preferred option.

2.5.1 Benefit Criteria and Weights

The benefit criteria employed to select and evaluate the options were agreed by the Project Team who then applied a weighting to each of the criteria in recognition of their relative importance to the project. The project criterion and agreed weighting is described in following table

2.5.2 Non-Financial Benefit Criteria

Detailed below is the list of Benefit Criteria, their descriptors, rank and the weight allocated.

Table 2-6- Benefit Criteria Ranking and Scoring

Benefit Criteria	Description of Criteria	Rank	Weighting
Model of Emergency Surgical Care	<p>The provision of Emergency General Surgery Services that are safe, secure and effective and ensure quality assessment, treatment and care for all patients is the most important factor for consideration.</p> <p>It is important that the options align with the Regional and Trust strategic direction for Emergency General Surgery and have the flexibility to respond to future changes in service provision.</p> <p>Options which incorporate the following will score higher:</p> <ul style="list-style-type: none"> • Separation of emergency and elective general surgery pathways in terms of teams, time and facilities • Consultant surgeons covering emergencies must not cover, nor be expected to be in attendance on more than one site 	1	40

Benefit Criteria	Description of Criteria	Rank	Weighting
	<ul style="list-style-type: none"> • Assessment and Ambulatory Care Pathways with access for GPs and speciality advice • Seen by the appropriate specialty in a timely manner • Clear pathways for access for emergency general surgery team for advice, assessment and transfer of patients 		
Clinical Infrastructure	<p>The assessment of this criterion will focus on the ability of each option to:</p> <ul style="list-style-type: none"> • Provide the capacity and environment that satisfies the existing and projected demand for Emergency General Surgery attendances and admissions. Standards for Emergency and Elective General Surgery state that the hospital must have access to critical care services including access to level 3 and level 2 care beds and a critical outreach team. • Provision of an emergency surgery theatre must be available 24 hours per day 7 days per week • Bed Capacity – Impacts on bed availability on both acute sites for both surgery and medicine. Based on a detailed bed modelling exercise Trust has identified a need for 98 surgical beds to deliver the general surgery service to the Southern Trust population. 	2	20
Clinical Interdependencies	<p>The assessment of this criterion will focus on the ability of each option to provide:</p> <ul style="list-style-type: none"> • Access to radiology diagnostic services 24 hours per day 7 days per week. To include plain film x-ray, CT, MRI and ultrasound • Access to radiology interventional services 5-7 days per week to include drainage and more complex IR procedures • Access to laboratory services • Access to bleeding rota for gastroenterology services • Provision for Paediatrics • Support from other clinical specialties to include cardiology, renal, diabetes and care of the elderly 	3	15

Benefit Criteria	Description of Criteria	Rank	Weighting
Surgical Workforce	<p>A key corporate objective of the Trust focuses on ‘making the best use of resources’.</p> <p>The scoring of options should reflect the following:</p> <ul style="list-style-type: none"> • Optimise the staffing resource across general surgery to support the delivery of emergency care • Consideration of impact on other specialties • Consideration of impact on the wider health and social care system including other HSC Trusts and the Northern Ireland Ambulance Service (NIAS) in delivering the service model • Stability of workforce and less dependence on locum staff which may reduce governance issues as per standards – consultant rotas must be sufficient size with the majority of posts occupied by substantive post holders • Improve the Trust’s ability to recruit and retain adequate consultant staff to deliver the service model. • Options which provide a service model that offers access to all surgical specialities for all junior doctor trainees and the ability to receive mentorship in these areas will score higher. 	4	15
Implementation	<p>The assessment of this criterion will focus on:</p> <ul style="list-style-type: none"> • Those options that can be implemented in a timely manner to achieve changes more quickly will score higher. This may be for reasons such as minimal resource investment, capacity, service requirements, Estates works or time factors. • Time, and budget. This criterion relates to the process and the timescales involved in securing capital and revenue funding. 	5	10

The following table details the individual scores achieved by each option.

Table 2-7 – Scoring Matrix

The table below details sub-sections within each benefit criteria. Each subsection was scored out of 10 and an average taken for the overall score. Totals have been rounded to the nearest number.

xxx = fully meets criteria - Score between 7-9															
xx = - partially meets criteria 4-6															
x= does not meet Score between 1-3															
Will the option impact on the main points below															
	Model of Emergency Surgical Care				Clinical Infrastructure			Clinical Interdependencies				Surgical Workforce		Implementation	
	Single Site Model	Assessment and Ambulatory Care Pathways	Surgical Specialities	Separation of emergency and elective surgery	Critical Care Services	Bed Capacity and Infrastructure	Emergency Theatre 24/7	Diagnostic and interventional radiology	Bleeding Rota	Lab Services	Access to clinical specialties	Training and Development	Consultant rotas	Time Scale	Estates Works and Investment
Option 1 - Status Quo - Continue with Contingency Arrangements – 24/7 Emergency General Surgery Service at CAH	xxx	xx	xxx	xxx	xxx	xxx	xxx	xxx	x	xxx	xxx	xxx	xxx	xxx	xxx
	8	6	9	9	8	8	7	8	9	2	9	9	8	8	9
	31				23			29				16		17	
	8				8			7				8		9	
Option 4 - Single site DHH - 24/7 Emergency General Surgery Service at DHH	xxx	xxx	xxx	xxx	xx	x	xxx	xx	x	xxx	xx	xx	xxx	x	x
	9	9	9	9	5	2	8	5	6	9	5	6	8	3	3
	36				15			25				14		6	
	9				5			6				7		3	
Option 8 - Single site CAH - 24/7 Emergency General Surgery Service at CAH	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx	xxx	xxx	xxx	xxx	xxx	xxx
	9	9	9	9	9	8	7	8	9	6	9	9	8	8	8
	36				23			33				16		16	
	9				8			8				8		8	

The following table details the final scores and the ranking of the options.

Table 2-8 – Final Scores and Ranking of Options

		Option 1		Option 4		Option 8	
	Weight	Score	Weight	Score	Weight	Score	Weight
Model of Emergency Surgical Care	40	8	320	9	360	9	360
Clinical Infrastructure	20	8	160	5	100	8	160
Clinical Interdependencies	15	7	105	6	90	8	120
Surgical Workforce	15	8	120	7	105	8	120
Implementation	10	9	90	3	30	8	80
TOTAL SCORE	100		795		685		840
Ranking		2		3		1	

2.5.3 Rationale for Scoring

The following table details the rationale for scoring for each of the options under the agreed criterion.

Table 2-9 – Rationale for scoring

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
Criterion 1– Model of Emergency Surgical Care			
Option 1 - Status Quo - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital site – No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance	8	8	<p>Single Site Model: The Regional Emergency General Surgery Standards indicate that consultant surgeons covering emergency surgery should be delivered by a 24 hours per day 7 days per week consultant led surgical team and must not cover, nor be expected to be in attendance, on more than one site. This option scored high as it will provide an emergency surgical service which will be delivered by a 24 hours per day 7 days per week consultant-led emergency surgical team on one site.</p> <p>The service will be delivered by an adequately staffed and experienced consultant-led emergency surgical team which will provide a safe, secure and effective emergency surgical service for the population we serve.</p> <p>This option scored lower than the other options as this is a contingency arrangement.</p>
		6	<p>Assessment and Ambulatory Care Pathways – Surgical Ambulatory is provided on the Craigavon Area Hospital site however further development of the pathways are required. A new surgical ambulatory unit has been constructed on the Craigavon Area Hospital site which does provide accommodation for this service.</p>
		9	<p>Surgical Specialties - This option scored high against this criterion as the general surgery service will have access to all surgical specialities on site to seek guidance and advice and likewise surgical specialities will also have access to general surgeons.</p>

Rationale for Scoring – Emergency General Surgery Service

	Total Score	Sub Score	Explanation
		8	Separation of Emergency and elective surgery - This option scored high as there is currently separation of emergency and elective surgery.
Option 4 – Single site Daisy Hill Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital	9	9	<p>Single Site Model: The Regional Emergency General Surgery Standards indicate that consultant surgeons covering emergency surgery should be delivered by a 24 hours per day 7 days per week consultant led surgical team and must not cover, nor be expected to be in attendance, on more than one site. This option scored high as it will provide an emergency surgical service which will be delivered by a 24 hours per day 7 days per week consultant-led emergency surgical team on one site.</p> <p>The service will be delivered by an adequately staffed and experienced consultant-led emergency surgical team which will provide a safe, secure and effective emergency surgical service for the population we serve.</p> <p>This scored higher than option one as this permanent service change to the service model as having an appropriately staffed surgical team led by consultant surgeons on site with access to all surgical specialties offers greater opportunities for trainees in terms of enhanced learning and mentorship making the Southern Trust a great place to work.</p>
		9	Assessment and Ambulatory Care Pathways – Surgical Ambulatory will be provided on the Daisy Hill Hospital site however further development of the pathways are required.
		9	Surgical Specialties - This option scored high against this criterion as the general surgery service will have access to all surgical specialities on site to seek face to face guidance and advice and likewise surgical specialities will also have access to general surgeons.
		9	Separation of Emergency and elective surgery - This option scored higher than Option 1 as while there is currently separation of emergency and elective surgery this will be

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
			further developed with the implementation of a permanent option for emergency general surgery.
Option 8 – Single site Craigavon Area Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital	9	9	<p>Single Site Model: The Regional Emergency General Surgery Standards indicate that consultant surgeons covering emergency surgery should be delivered by a 24 hours per day 7 days per week consultant led surgical team and must not cover, nor be expected to be in attendance, on more than one site. This option scored high as it will provide an emergency surgical service which will be delivered by a 24 hours per day 7 days per week consultant-led emergency surgical team on one site.</p> <p>The service will be delivered by an adequately staffed and experienced consultant-led emergency surgical team which will provide a safe, secure and effective emergency surgical service for the population we serve.</p> <p>This scored higher than option one as this permanent service change to the service model as having an appropriately staffed surgical team led by consultant surgeons on site with access to all surgical specialties offers greater opportunities for trainees in terms of enhanced learning and mentorship making the Southern Trust a great place to work.</p>
		9	<p>Assessment and Ambulatory Care Pathways - Surgical Ambulatory is provided on the Craigavon Area Hospital site however further development of the pathways are required. A new surgical ambulatory unit has been constructed on the Craigavon Area Hospital site, which will provide accommodation for this service. This option scored higher than Option 1 as permanent staffing can be appointed to this service enabling development of ambulatory care pathways supported by a substantive team.</p>

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
		9	Surgical Specialties - This option scored high against this criterion as the general surgery service will have access to all surgical specialities on site to seek face to face guidance and advice and likewise surgical specialities will also have access to general surgeons.
		9	Separation of Emergency and elective surgery - This option scored higher than Option 1 as while there is currently separation of emergency and elective surgery this will be further developed with the implementation of a permanent option for emergency general surgery.
Criterion 2 – Clinical Infrastructure			
Option 1 - Status Quo - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital - No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance	8	8	Critical Care: This option scored high against this criterion as there is access to a level 3 Intensive Care Unit on the Craigavon Area Hospital site. Staff in Intensive Care Unit will have access to the general surgical team at all times for advice and guidance on the care of their patients.
		7	Bed Capacity and Infrastructure - Option 1 scored 7 against this criterion. A bed scoping and modelling exercise identified a requirement for 98 beds to meet the demand of the Southern Trust population. Craigavon Area Hospital offers both the capacity and infrastructure to deliver the required bed modelling. However, the option did not score higher than 7 in recognition of the impact on medical bed provision which will need to retract to enable the full surgical complement to be delivered. It is recognised that surgical beds are required to be ring-fenced.
		8	Emergency Theatre – This option scored high as there is an emergency theatre available 24 hours per day 7 days per week.
Option 4 – Single site Daisy Hill Hospital – 24 hours per day 7 days per week Emergency	5	5	Critical Care Services - This option scored lower as it recognised that there is no level 3 intensive Care unit provision in Daisy Hill Hospital, which consequently impacts on the complexity of surgery that can be carried out on the site. Prior to the implementation of the contingency arrangement in February 2022, patients requiring complex surgery

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
General Surgery Service at Daisy Hill Hospital			would have been transferred to Craigavon Area Hospital following their operation to ensure access to appropriate Intensive Care Unit care. This option would still require complex and critical patients to be stabilised at Daisy Hill Hospital Emergency Department and transferred to Craigavon Area Hospital for certain operations.
		2	Bed Capacity and Infrastructure - Bed capacity and Infrastructure: Following the bed scoping exercise, Daisy Hill Hospital does not have capacity to accommodate the required bed modelling for the service demand and therefore this option only scored 2 against this criterion. A bed scoping and modelling exercise identified a requirement for 98 beds to meet the demand of the Southern Trust population for surgical provision.
		8	Emergency Theatre – currently there is not 24 hours per day 7 days per week emergency theatre coverage however if this option is implemented this can be put in place.
Option 8 – Single site Craigavon Area Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital	8	8	Critical Care: This option scored high against this criterion as there is access to a level 3 Intensive Care Unit on the Craigavon Area Hospital site. Staff in Intensive Care Unit will have access to the general surgical team at all times for face to face advice and guidance on the care of their patients.
		7	Bed Capacity and Infrastructure – Option 8 scored equally with Option 1 against this criterion. A bed scoping and modelling exercise identified a requirement for 98 beds to meet the demand of the Southern Trust population. Craigavon Area Hospital offers both the capacity and infrastructure to deliver the required bed modelling. However, the option did not score higher than 7 in recognition of the impact on medical bed provision which will need to retract to enable the full surgical complement to be delivered.
		8	Emergency Theatre - This option scored high as there is an emergency theatre available 24 hours per day 7 days per week.
Criterion 3 – Clinical Interdependencies			

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
Option 1 - Status Quo - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital - No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance	7	9	Diagnostic and Interventional Radiology - This option will provide access to the full range of diagnostic services 24 hours per day 7 days per week and timely access to MRI, Endoscopic Retrograde Cholangiopancreatography (ERCP), CT and ultrasound scanning on site.
		2	Bleeding Rota – there is currently no bleeding rota however future requirements are being scoped.
		9	Lab Services - There is a full laboratory service on both acute sites.
		9	Access to Clinical Specialities – This option scored high as there is access to clinical specialities on the Craigavon Area Hospital site.
Option 4 – Single site Daisy Hill Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital	6	5	Diagnostic and Interventional Radiology - This option scored lower as the Diagnostic infrastructure on Daisy Hill Hospital site and requires significant investment to provide a full diagnostic provision i.e. there is no provision for MRI on Daisy Hill Hospital site.
		6	Bleeding Rota - there is currently no bleeding rota however future requirements are being scoped. It is envisaged that this will be further developed under this option.
		9	Lab Services - There is a full laboratory service on both acute sites.
		5	Access to Clinical Specialities – This option scored lower as there is not access to a full range of clinical specialities on the Daisy Hill Hospital site.
Option 8 – Single site Craigavon Area Hospital – 24 hours per day 7 days per week Emergency	8	9	Diagnostic and Interventional Radiology - This option will provide access to the full range of diagnostic services 24 hours per day 7 days per week and timely access to MRI, Endoscopic Retrograde Cholangiopancreatography (ERCP), CT and ultrasound scanning on site.

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
General Surgery Service at Craigavon Area Hospital		6	Bleeding Rotas - there is currently no bleeding rota however future requirements are being scoped. It is envisaged that this will be further developed under this option.
		9	Lab Services – There is a full laboratory service on both acute sites.
		9	Access to Clinical Specialities - This option scored high as there is access to clinical specialities on the Craigavon Area Hospital site.
Criterion 4 – Surgical Workforce			
Option 1 - Status Quo - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital - No change to current service provision. There will not be full implementation of the Emergency General Surgery Standards to achieve full compliance	8	8	Training and Development: This option scored 8 against this criterion as there are opportunities for trainees by having a surgical team led by a consultant surgeon on site and face to face access to all surgical specialties offers trainees’ enhanced learning and mentorship. The standards also refer to surgical trainees having access to training that is delivered in a supportive environment which enables them to have access to a diverse surgical practice to enable them to reach potential and meet the required competencies.
		8	Consultant Rotas: This option scored high as the service will be able to populate a single rota. The Standards recommend that Consultant rotas must be of a sufficient size with the majority of posts being substantive in order to deal with demand and to provide a safe and sustainable service.
Option 4 – Single site Daisy Hill Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital	7	6	Training and Development: This option scored 6 as trainees will not have face to face access for advice and guidance from a range of surgical specialties nor will they have access to the support infrastructure required for general surgery. Trainees may not have access to sufficient volume and diversity of emergency surgical practice under this option.

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
		8	Consultant Rotas: This option scored high as the service will be able to populate a single rota. The Standards recommend that Consultant rotas must be of a sufficient size with the majority of posts being substantive in order to deal with demand and to provide a safe and sustainable service.
Option 8 – Single site Craigavon Area Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital	8	8	Training and Development: This option scored 8 against this criterion as there are opportunities for trainees by having a surgical team led by a consultant surgeon on site and face to face access to all surgical specialties offers trainees’ enhanced learning and mentorship. The standards also refer to surgical trainees having access to training that is delivered in a supportive environment which enables them to have access to a diverse surgical practice to enable them to reach potential and meet the required competencies.
		8	Consultant Rotas: This option scored high as the service will be able to populate a single rota. The Standards recommend that Consultant rotas must be of a sufficient size with the majority of posts being substantive in order to deal with demand and to provide a safe and sustainable service.
Criterion 5 – Implementation			
Option 1 - Status Quo - Continue with Contingency Arrangements – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital - No change to current service provision. There will not be full implementation of the Emergency General Surgery	9	9	Timescale: This option scored 9 against this criterion as the service is currently temporarily operating from Craigavon Area Hospital and no further changes would be implemented.
		8	Estates works and investment: This option scored high against this criterion as no further works would be required.

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
Standards to achieve full compliance			
Option 4 – Single site Daisy Hill Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Daisy Hill Hospital	3	3	Timescale: This option scored 3 as the timescale would be considerably longer to implement this option due to the infrastructure requirements on the Daisy Hill Hospital site. It was recognised in the Review of General Surgery in Northern Ireland that only two hospitals out of eight met the standards and Daisy Hill Hospital will require fundamental changes in a number of areas to meet the standards. There is an expectation that all sites will meet the standards and are required to consider if there has to be service reconfiguration in order to meet these.
		3	Estates works and investment: This option scored low against this criterion as the Daisy Hill Hospital site would require considerable investment to enable emergency general surgery to operate from this single site. There is no Intensive Care Unit level 3 available in Daisy Hill Hospital. Diagnostic services would be required to be enhanced to include an MRI and provision of two permanent CT Scanners. Bed capacity would not be sufficient and therefore reconfiguration of ward space may be required. An ambulatory area for general surgery would also be required. Whilst the business case for high/low voltage has received approval it will take a number of years to take forward these works which are necessary for future infrastructure requirements. Despite the Trust’s efforts to address the much needed infrastructure requirements on the Daisy Hill Hospital site (a bid for an interim scheme to deliver a twin diagnostic suite) it must be recognised that without funding and approval to progress any such works or improvements the challenges remain.

Rationale for Scoring – Emergency General Surgery Service			
	Total Score	Sub Score	Explanation
			The emergency general surgery standards refers to a hospital with emergency inpatients surgery having access to critical care services 24 hours per day 7 days per week with access to level 3 beds. While there is access to these services via transfer to Craigavon Area Hospital there will not be the surgical team available at Craigavon Area Hospital to support and advise Intensive Care Unit on patient care.
Option 8 – Single site Craigavon Area Hospital – 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital	8	8	Timescale: This option scored 8 against this criterion as the service is currently temporarily operating from Craigavon Area Hospital. It was recognised that further implementation would be required to establish ambulatory pathways and fully implement all necessary policies and procedures for a permanent solution consequently this option did not score any higher than 8. It was recognised in the Review of General Surgery in Northern Ireland that only two hospitals out of eight met the standards however Craigavon Area Hospital could meet the standards by putting in place the necessary processes or resources.
		8	Estates works and investment: This option scored high against this criterion as only minor estates works would be required to implement this option.

2.6 Preferred Service Model

In conclusion, the preferred service model for emergency general surgery is:

Option 8 - Single site Model Craigavon Area Hospital site - 24 hours per day 7 days per week Emergency General Surgery Service at Craigavon Area Hospital

- Full implementation of the Emergency General Surgery Standards to achieve full compliance
- Patients continue to present at both Craigavon Area Hospital and Daisy Hill Hospital Emergency Department
- All emergency surgical admissions to Craigavon Area Hospital
- Ongoing Surgical Assessment and Ambulatory provided at Craigavon Area Hospital
- Elective Surgery will continue to be provided at Daisy Hill Hospital, Craigavon Area Hospital and South Tyrone Hospital

This option scored highest in its ability to deliver on the benefit criteria and will provide the following benefits:

- The service will be delivered by an adequately staffed and experienced consultant-led emergency surgical team which will provide a safe and high quality emergency surgical service for the population we serve.
- The Craigavon Area Hospital site will allow critically ill surgical patients (including post-operative emergency patients) to have access to a fully functioning intensive care unit with both level 3 (ICU) and level 2 (HDU) intensive care beds (*Critical Care Network Northern Ireland Registered*).
- The Emergency General Surgery service will have better access to all sub speciality medical and surgical services on the Craigavon Area Hospital site to seek guidance and advice.
- This option will provide access, for emergency surgical patients, to the full range of diagnostic services (radiology and laboratory), 24 hours per day 7 days per week, and timely access to MRI and ultrasound
- The Emergency Department services at both Craigavon Area Hospital and Daisy Hill Hospital will be maintained and supported. Both Emergency Departments will continue to have access to surgical advice and support.
- Patients transferred from Daisy Hill Hospital Emergency Department for surgical assessment/admission will have direct access to the Emergency Surgical service at Craigavon Area Hospital using specialist surgical referral pathways.

- Consolidating the emergency general surgery service on the Craigavon Area Hospital site will ensure appropriate levels of surgical staff can support a sustainable surgical consultant service rota. This will also reduce reliance on locum staff.
- The Trust has modelled the number of surgical inpatient beds required to provide the surgical service of the preferred option in this consultation. The modelling has confirmed that this can be achieved on the Craigavon Area Hospital site.
- A strengthened Emergency General Surgical Service on the Craigavon Hospital Site with an appropriately staffed consultant-led surgical team with access to all surgical specialties offers greater opportunities for training of surgical trainees further enhancing surgical training in Southern Trust.
- The presence of an enhanced Emergency Surgical Service for the Southern Trust area at Craigavon Area Hospital will be attractive to new staff and thus will support recruitment and retention of all members of the surgical team and the wider supporting clinical services.
- Further development of policies and protocols in line with regional standards.