Children's Surgery

Options Appraisal

Version 3 - 19.05.2014

Contents

1 Introduction

This commissioner options appraisal should be read in conjunction with the NLaG business case for children's surgery, which sets out the background information to the children's surgery (Appendix 1).

The purpose of this paper is to provide the information required by the Council of Members from each of the Clinical Commissioning Groups, along with the Partnership Board from North East Lincolnshire Clinical Commissioning Group and the Governing Body from North Lincolnshire Clinical Commissioning Group to make a decision on how to address quality and safety concerns raised by the provider clinical teams.

1. Executive summary

The delivery of surgical services for children in the United Kingdom has changed in the last 20 years and there has been a significant decline in the number of children who have surgery performed in district general hospitals over this time (NCEPOD 2011). Several reports have identified the need for improved and consistent care for paediatric surgical patients and significant changes have resulted in the way paediatric surgery is led and delivered (Every Child Matters 2003, the Children's Plan 2007, the NHS Next Stage Review 2008, RCPCH 2013). Improvements include specialisation and centralisation of children's surgical services and modifications to staff training. Recommendations were made that surgeons and anaesthetists should not undertake occasional paediatric practice and that consultants who have responsibility for children need to maintain their competence in the management of paediatrics. Provider clinical teams have raised concerns that the volumes of children having surgery in Northern Lincolnshire do not give critical mass to maintain the specific expertise required for operating on children.

Within Northern Lincolnshire there already exists robust mechanisms which ensure complex paediatric care needs are met by a tertiary provider. This option appraisal document in conjunction with the NLaG children's surgery paper considers a range of options for addressing the quality concerns raised by provider clinicians.

1.1 Options being considered

Commissioners are reviewing a range of options to determine which is right for their health communities for the long term. This thinking takes into consideration the safety and quality aspects of the service, drawing on national and regional guidance and clinical best practice recommendations for surgery on Children services where they are available.

Considerations on the location of the service take into account the impact of provision in different locations according to access, deliverability and cost.

The options being considered by commissioners are:

1. Do nothing
2. Rotate consultants between both sites for specialties where there are insufficient volumes
3. Rotational training programme with tertiary centre/providers
4. Decommission the local service and send all Children's surgery to tertiary centres

1.2 Programme Board recommendation

The programme board met to discuss the options listed above, and to review them against the evaluation criteria that was agreed for use with large scale change. The outcome of this meeting was that options 1 and 2 were not acceptable for quality reasons, however the programme board did not feel that options 3 or 4 offered an acceptable solution to the quality issues raised. Two additional options were suggested by the programme board for additional work prior to any decisions being taken:

5. Centralise the children's surgery on SGH site
6. Centralise children's surgery on DPOW site

1.3 Next steps

It has not been possible to undertake the full business case review for this service at this time, so this paper provides the outline options appraisal for discussion. The programme board recommendation is that options 5 and 6 are worked up in more detail to allow a formal review of benefits and risks.

The provider clinicians have requested advice from the Clinical Senate on the safety and validity of these options.

These will then be taken through a public engagement phase to gain input from the public, patients and our stakeholders, and the full business case content will be prepared at that time.

3. Evaluating the options

Commissioners will use a range of information to consider the options including evidence around risks and benefits (as documented in this options appraisal), evaluation criteria and equality impact assessments.

At the start of the programme commissioners developed an evaluation criteria to use as part of the decision making process to highlight benefits and dis-benefits with any significant service change areas. These criteria are shown below:

Table 1 - Healthy Lives, Healthy Futures Evaluation Criteria

Criteria	Indicator
Quality of care	• Impact on premature / avoidable deaths • Impact on staffing levels • Patient experience e.g. complaints and feedback • Deaths in place of choice / place of residence (if applicable) • Patient safety – conforming with best practice / guidelines
Access to care	• Impact on population weighted average travel time • Feedback from patients and public – i.e. acceptability, willingness to travel • Proportion of visits/interventions delivered locally in the community or in patients' homes • Number of options available for service delivery to local patients (i.e. patient choice)
Affordability	• Up front capital and other non-recurring costs required to implement reconfiguration • Assessment of ongoing financial viability of hospital sites • Assessment of affordability within commissioners allocations • Total value of each option incorporating future capital and revenue implications • Assessment of payback period (if applicable)
Deliverability	• Workforce experience/quality (attractiveness for employment) • Assessment of ease of delivering option in terms of public and stakeholder acceptability • Assessment of ease of creating required capacity shifts within timescales (workforce and physical facilities) • Degree of integration across acute, primary, community and mental health services

Commissioners agree that quality of care should be the highest priority when it comes to decisions about service provision. However it is important to balance the other elements of the criteria to ensure that our services are maintained with the right level of skilled workforce, at locations that are accessible for patients, and in a way that uses the scarce resources as efficiently as possible.

As part of the engagement processes patients and the public were asked about the evaluation criteria headings and how they would prioritise them. Over 80% of people felt that quality of care should be rated the highest priority when considering service change ideas. It has been agreed that the quality and safety criteria will be weighted accordingly when it comes to making decisions about changes to the service including hyper-acute stroke.

The evaluation process has been documented in Appendix 2.

4. Equality Impact Assessment (EQIA)

Commissioners are committed to achieving equality, celebrating diversity, promoting inclusion and embracing human rights as set out in the NHS Constitution, and in line with the public sector equality duty outlined in the Equality Act 2010. This includes paying due regard to eliminating unlawful discrimination, advancing equality of opportunity and fostering good relationships between equality groups.

There are 9 "protected" characteristics that the Equality Act defines:

- Age
- Disability
- Gender re-assignment
- Marriage and Civil partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Sex
- Sexual orientation

In line with work undertaken as part of the health needs analysis, Commissioners will also give consideration to people from differing socio economic groups / backgrounds (health inequalities).

4.1 Equality data

The demographic data for the protected groups is shown below.

Table 2 – Age distribution of CCG populations 2011

CCG	Age band (years)							All ages
	0 - 4	5 - 16	17 - 18	19 - 49	50 - 64	65 - 74	75+	
North Lincolnshire	10221	23140	4199	65584	34056	16440	13876	167516
	6%	14%	3%	39%	20%	10%	8%	100%
North East Lincolnshire	10001	22215	4225	64212	30569	14870	13643	159735
	6%	14%	3%	40%	19%	9%	9%	100%
Lincolnshire East	11282	28047	5326	78463	49874	30292	24487	227771
	5%	12%	2%	34%	22%	13%	11%	100%
East Riding of Yorkshire	15402	40393	7909	113019	68652	36818	31193	313386
	5%	13%	3%	36%	22%	12%	10%	100%
Lincolnshire West	12358	28864	5800	94218	42854	22228	18931	225253
	5%	13%	3%	42%	19%	10%	8%	100%

Source: Office for National Statistics (ONS) mid-2011 Census based population estimates for Clinical Commissioning Groups.

Table 3 – Age and sex distribution of CCG populations 2011

CCG	Age band (years)							All ages
	0 - 4	5 - 16	17 - 18	19 - 49	50 - 64	65 - 74	75+	
North Lincolnshire	10221	23140	4199	65584	34056	16440	13876	167516
% male	51%	51%	52%	50%	50%	49%	40%	49%
North East Lincolnshire	10001	22215	4225	64212	30569	14870	13643	159735
% male	51%	51%	50%	50%	50%	48%	41%	49%
Lincolnshire East	11282	28047	5326	78463	49874	30292	24487	227771
% male	51%	51%	52%	49%	49%	50%	43%	49%
East Riding of Yorkshire	15402	40393	7909	113019	68652	36818	31193	313386
% male	51%	51%	52%	50%	49%	48%	41%	49%
Lincolnshire West	12358	28864	5800	94218	42854	22228	18931	225253
% male	52%	51%	49%	49%	49%	49%	42%	49%

Source: Office for National Statistics (ONS) mid-2011 Census based population estimates for Clinical Commissioning Groups.

Table 4 – Ethnicity by CCG population

CCG	Ethnicity					All ages
	White	Mixed / multiple	Asian/Asian British	Black / African / Caribbean / Black British	Other	
North Lincolnshire	160748	1244	4549	494	411	167446
	96%	1%	3%	0.3%	0.2%	100%
North East Lincolnshire	155421	1186	2129	411	469	159616
	97%	1%	1%	0.3%	0.3%	100%
Lincolnshire East	327789	2301	2961	598	530	334179
	98%	1%	1%	0.2%	0.2%	100%
East Riding of Yorkshire	134314	937	789	264	97	136401
	98%	1%	1%	0.2%	0.1%	100%
Lincolnshire West	87600	630	728	224	68	89250
	98%	1%	1%	0.3%	0.1%	100%

Source: Office for National Statistics (ONS) mid-2011 Census based population estimates for Clinical Commissioning Groups.

Table 5 – Religion / belief distribution of CCG populations 2011

CCG	Religion									
	None	Christian	Buddhist	Hindu	Jewish	Muslim	Sikh	Other	Not stated	Total
North Lincolnshire	40176	110554	381	445	48	3024	538	417	11863	167446
	24%	66%	0.2%	0.3%	0%	2%	0.3%	0.2%	7%	100%
North East Lincolnshire	48476	96836	347	386	64	1332	158	533	11484	159616
	30%	61%	0.2%	0.2%	0.0%	1%	0.1%	0.3%	7%	100%
Lincolnshire East	78296	227343	702	607	337	1309	174	863	24548	334179
	23%	68%	0.2%	0.2%	0.1%	0.4%	0.1%	0.3%	7%	100%
East Riding of Yorkshire	31196	93691	226	126	84	366	49	565	10098	136401
	23%	69%	0.2%	0.1%	0.1%	0.3%	0.0%	0.4%	7%	100%
Lincolnshire West	19439	62739	141	172	31	212	88	303	6125	89250
	22%	70%	0.2%	0.2%	0.0%	0.2%	0.1%	0.3%	7%	100%

Source: Office for National Statistics (ONS) mid-2011 Census based population estimates for Clinical Commissioning Groups.

Table 6 – Sexual orientation (proxy) and marital state distribution of CCG populations 2011

CCG	Single	Married	In a registered same sex civil-partnership	Separated	Divorced	Widowed	Population aged 16+
North Lincolnshire	39393	68435	212	3369	14278	10418	136105
	29%	50%	0.2%	2%	10%	8%	100%
North East Lincolnshire	42808	58434	185	3369	14492	10089	129377
	33%	45%	0.1%	3%	11%	8%	100%
Lincolnshire East	72618	150812	600	6239	25674	22390	278333
	26%	54%	0.2%	2%	9%	8%	100%
East Riding of Yorkshire	28024	61840	194	2582	11875	10903	115418
	24%	54%	0.2%	2%	10%	9%	100%
Lincolnshire West	18435	40509	110	1657	7202	5840	73753
	25%	55%	0.1%	2%	10%	8%	100%

Source:

Table 7 – Disability distribution of CCG populations 2011

CCG	No disability	Day to day activities limited a lot	Day to day activities limited a little	Population
North Lincolnshire	270214	29029	34936	334179
	81%	9%	10%	100%
North East Lincolnshire	128496	14786	16334	159616
	81%	9%	10%	100%
Lincolnshire East	135167	15333	16946	167446
	81%	9%	10%	100%
East Lindsey	100999	17475	17927	136401
	74%	13%	13%	100%
West Lindsey	71466	7944	9840	89250

	80%	9%	11%	100%

Source: Office for National Statistics (ONS) mid-2011 Census based population estimates for Clinical Commissioning Groups.

4.2 Public feedback on equality issues

As part of the second engagement phase a range of questions were asked about equality issues. Most of the feedback in this section related to accessibility, particularly for vulnerable people and those living in rural locations. Comments were also received about reaching vulnerable people and supporting those with disabilities, families and those on a low income. Older people and those with mental health problems were highlighted, particularly dementia. Commissioners need to proactively meet the needs of vulnerable people especially if services are moved further away and no additional support is in place.

The public want services that are person-centred rather than designed around the needs of the organisations:

> *"If services are right for disadvantaged groups they are probably right for everyone else"*
>
> *"Give due regard to the quiet-voiced majority"*
>
> *"Make sure that important information is clear in other languages"*
>
> *"Vulnerable and elderly people are often reluctant to ask for help. They need to keep their independence but need varying degrees of help"*

The full Equality Impact Assessment analysis can be found as Appendix 3.

5. Option 1 – Do nothing: Children's surgery remains unchanged

5.1 Assumptions

This option makes the following assumptions:

- The service will remain on both sites in its current capacity

5.2 Risks and Issues

Table 8 – Risks and issues of option 1 (do nothing)

Category	Risk / Issue	RAG	Mitigation
Quality & Safety	With the current volumes going through the service there will be insufficient activity in some specialties to maintain all round clinical competency. This particularly relates to General Surgery, Urology and Ophthalmology. However it is suggested by provider clinicians that the complexity of Ophthalmology procedures now undertaken in an outpatient setting provide the volumes and complexities to ensure skills are maintained.	Red	Consider reducing the number of General Surgeons and Urologists and associated clinical teams that operate on children to increase the volumes per person. However this will impact on the ability to cover holiday and sickness absences or to cover out of hours rotas.
Quality & Safety	Clinical outcomes and patient safety may be compromised in low volume specialties.	Red	Consider joint working with another trust to repatriate surgery from other sites to increase the volumes going through the service.
Deliverability	More activity is moving to tertiary centres, which means fewer General Paediatric Surgery (GPS) training opportunities. (GPS is defined as the surgical management of relatively common non-specialised conditions in general surgery and urology in children who do not require complex perioperative care arrangements). This could impact on the number of surgeons coming through the system that are exposed to GPS in medical training, and able to cover routine or emergency GPS rotas.	Red	None identified.

5.3 Benefits

Benefits associated with this option are shown below:

Table 9 – Benefits of option 1 (do nothing)

Category	Benefit
Access	Public have raised concerns over transportation and access if services are moved, so the "do nothing" option may be more acceptable publically.
Finance	No impact on finance unless activity increases

5.4 Equality Impact Assessment

The impact on people with protected characteristics can be seen below:

Table 10 – Assessment of the impact on people with protected characteristics

Protected characteristic	Impact	Nature of impact
Age	Negative	With the current volumes of children patients going through the service there will be insufficient activity in some specialties to maintain all round clinical competencies. This particularly relates to General Surgery, urology and ophthalmology. However it is suggested by provider clinicians that the complexity of ophthalmology procedures now undertaken in an outpatient setting provide the volumes and complexities to ensure skills are maintained.
Disability	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Gender reassignment	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Marriage and civil partnership	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Pregnancy and maternity	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Race	Neutral	Potential negative impact for service users for whom English is not their first language and may have issues understanding and retaining information about their condition and its future management.
Religion and belief	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Sex	Negative	National Stroke Association noted that statistics showed that males have a higher risk of having a stroke. Therefore returning the service back to its delivery prior to summer 2013 would have a potentially negative impact across Northern Lincolnshire.
Sexual orientation	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Deprivation	Neutral	It should be noted that deprivation cuts across Northern Lincolnshire. The low number of people with access to private transport is well documented, especially in the context of accessing services. This is exacerbated by the rural nature of the area and poor public transport. In North East Lincolnshire 28.3% of children are in poverty and in North Lincolnshire the figure is 21.0%. In view of the large demographic areas both SGH and DPoW service serves, and the associated deprivation within North East Lincolnshire in particular, the need to ensure children and families can access appropriate healthcare is paramount.
Human rights	Negative	If the service were to be remain clinical outcomes and patient safety may be compromised in low volume specialties.

5.5 Evaluation criteria assessment

The programme board undertook an evaluation criteria scoring exercise, taking into consideration the above benefits and risks and the views of the local clinical community. A summary of the scoring is included below:

Table 11 – Evaluation scoring for option 1 (do nothing)

Criteria	Score	Rationale
Quality	72	Concerns were raised by the provider clinicians, and so the programme board did not feel it would be appropriate to maintain the service in its current form.
Access	36	This was not expected to have negative impact on access, however it was recognised that the public had been told about quality concerns so they would likely expect changes to be implemented to address those issues.
Affordability	40	This scored highest from an affordability perspective as there would be no additional costs incurred.
Deliverability	48	This would not offer improvements to staffing or attractiveness for employment, however it was not anticipated that there would be a significant negative impact either.
Total	196	

6. Option 2 – Rotate Consultants between both sites

6.1 Assumptions

This option makes the following assumptions:

- The numbers of surgeons, anaesthetists and support teams operating on children is reduced to form a joint team, and medical staff achieve all round clinical competence through combining volumes from both sites
- Where practicable procedures will be delivered from one speciality to increase volumes per surgeon (e.g. circumcision)
- On call and out of hours service is provided by the joint team, and they will travel to the appropriate site when required
- Outpatient services continue to be delivered from both sites

6.2 Risks / issues

The risks and issues associated with this option are outlined below:

Table 12 – Risks and issues of option 2 (rotation of consultants between both sites)

Category	Risk / Issue	RAG	Mitigation
Quality & Safety	Patients (children) may still attend local A&E departments with problems that require emergency surgery. If there is no surgical service on that site for that time, patients may be required to be transferred between local and tertiary sites.	Amber	Establish protocol to ensure that ambulances take presenting children to the relevant tertiary centre if it is likely they may require surgery. For those patients who do not have obvious symptoms a protocol will be require to transfer them to the appropriate site if required.
Quality & Safety	Rotation of surgeons may still present risks if the Anaesthetic and theatre teams do not work regularly with children.	Red	Rotate the whole surgical team as a joint team (including Anaesthetists, ODPs, scrub team and recovery staff).
Quality & Safety	Ward staff may not see sufficient children to maintain their skills if the service rotates between both sites.	Red	Consider rotating a specialist paediatric matron with post-operative experience to support the ward staff with regular training and oversight.
Deliverability	Rotating across sites is not attractive to staff, and this may impact negatively on morale.	Amber	Staff could be incentivised to move within the service with travel contributions.
Deliverability	Rotating across sites may compromise on call rotas and reduce the ability to offer a comprehensive service. This has already been raised by the ENT service as being unsustainable.	Red	Anaesthetists and Paediatricians could take responsibility for post-operative patients. If there are complications the joint rotational team could be available on the telephone or travel to the relevant site if required.

6.3 Benefits

Benefits of this option are shown below:

Table 13 – Benefits of option 2 (rotation of consultants between both sites)

Category	Benefit
Quality & safety	Provider clinicians suggest that this would address the quality issues with volumes of surgery for the specialties that are currently below the recommended volume to achieve a safe service.
Access	This will still provide the surgical service at both sites which will be more acceptable for patients.

6.4 Equality Impact Assessment

The impact on people with protected characteristics can be seen below:

Table 14 – Assessment of the impact on people with protected characteristics

Protected characteristic	Impact	Nature of impact
Age	Negative	Children patients may still attend local A&E with problems that require emergency surgery. If there is no surgical service on that site for that time, patients may be required to be transferred between local and tertiary sites. In addition rotation of surgeons may still present risks if the anaesthetic and theatre teams do not work regularly with children and ward staff may not see sufficient children to maintain their skills if the service rotates between both sites.
Disability	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Gender reassignment	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Marriage and civil partnership	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Pregnancy and maternity	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Race	Neutral	Potential negative impact for service users for whom English is not their first language and may have issues understanding and retaining information about their condition and its future management.
Religion and belief	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Sex	Negative	National Stroke Association noted that statistics showed that males have a higher risk of having a stroke. Therefore returning the service back to its delivery prior to summer 2013 would have a potentially negative impact across Northern Lincolnshire.
Sexual orientation	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Deprivation	Neutral	It should be noted that deprivation cuts across Northern Lincolnshire. The low number of people with access to private transport is well documented, especially in the context of accessing services. This is exacerbated by the rural nature of the area and poor public transport. In North East Lincolnshire 28.3% of children are in poverty and in North Lincolnshire the figure is 21.0%. In view of the large demographic areas both SGH and DPoW service serves, and the associated deprivation within North East Lincolnshire in particular, the need to ensure children and families can access appropriate healthcare is paramount. Rotating surgical services either entirely or by speciality will undoubtedly cause access to the appropriate healthcare an issue for some families. Consideration needs to be given to the potential increase in families being unable to access services if they are not local to them.
Human rights	Negative	Rotation of consultants between both sites may still present risks if the anaesthetic and theatre teams do not work regularly with children, also ward staff may not see sufficient children to maintain their skills due to the rotation.

6.5 Evaluation criteria assessment

The programme board undertook an evaluation criteria scoring exercise, taking into consideration the above benefits and risks and the views of the local clinical community. A summary of the scoring is included below:

Table 15 – Evaluation scoring for option 2 (rotation of consultants between both sites)

Criteria	Score	Rationale
Quality	45	This was not deemed a safe option as the clinical teams would not be present on each site for periods of time. It was also anticipated that staffing would not want to rotate, and that patients and the public would find it confusing.
Access	24	This could cause some patients to travel or be transported depending on urgency, and rotas.
Affordability	16	This was anticipated to be costly due to travel and additional staffing requirements.
Deliverability	16	It was assumed that this would be unpopular with staff, and require considerable travelling, and transporting of patients.

Total	101	This option scored lowest of all options due to the safety and deliverability issues.

7. Option 3 – Rotational training programme with tertiary providers

7.1 Assumptions

This option makes the following assumptions:

- Surgery for children is still delivered on both DPOW and SGH sites
- Medical staff rotate with tertiary providers to ensure that they achieve higher volumes of surgery and maintain their skills
- Outpatient services remain unchanged

7.2 Risks / issues

The risks and issues associated with this option are outlined below:

Table 16 – Risks and issues of option 3 (rotational training programme with tertiary providers)

Category	Risk / Issue	RAG	Mitigation
Quality & safety	Patients (children) may still attend local A&E departments with problems that require emergency surgery. If there is no surgical service on that site for that time, patients may be required to be transferred between local and tertiary sites.	Amber	Establish protocol to ensure that ambulances take presenting children to the relevant tertiary centre if it is likely they may require surgery. For those patients who do not have obvious symptoms a protocol will be require to transfer them to the appropriate site if required.
Quality & Safety	Tertiary providers may not be able to offer enough procedures to NLaG surgeons to provide the critical mass required.	Red	None identified.
Affordability	This may require recruitment of additional Medical staff if they are required off site for periods of time. Currently commissioners and providers are required to deliver significant cost savings, and this investment may prove to be prohibitive.	Red	Discuss with the tertiary provider a reciprocal rotation arrangement where one of their team replace the NLaG clinician during the rotation.
Deliverability	Rotating across sites is not attractive to staff, and this may impact negatively on morale.	Amber	Staff could be incentivised to move within the service with travel contributions.
Deliverability	Rotating with tertiary centres for may compromise service delivery and on call rotas if the surgeons are required to spend more time off site in the tertiary centre.	Red	Adjust rotas and staffing levels to ensure the service can be maintained. Use specialist GPs or locums to cover any gaps in rotas or service provision.
Deliverability	It may not be possible for all surgeons to take part in the rotational programme due to current commitments and job plans.	Red	Reduce the number involved in the programme, and therefore able to undertake the surgery on children.

7.3 Benefits

Benefits of this option are shown below:

Table 17 – Benefits of option 3 (rotational training programme with tertiary providers)

Category	Benefit
Access	This will allow the service to be delivered on both sites which will be more acceptable for the public
Deliverability	This could offer a more attractive proposition for staff if there is a tertiary rotation. This could impact positively on recruitment.

7.4 Equality Impact Assessment

The impact on people with protected characteristics can be seen below:

Table 18 – Assessment of the impact on people with protected characteristics

Protected characteristic	Impact	Nature of impact
Age	Negative	Children patients may still attend local A&E with problems that require emergency surgery. If there is no surgical service on that site for that time, patients may be required to be transferred between local and tertiary sites. Tertiary providers may not be able to offer enough procedures to NL&G surgeons to provide the critical mass required. Rotating with tertiary centres may compromise service delivery and on call rotas if the surgeons are required to spend more time off site in the tertiary centre.
Disability	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Gender reassignment	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Marriage and civil partnership	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Pregnancy and maternity	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Race	Neutral	Potential negative impact for service users for whom English is not their first language and may have issues understanding and retaining information about their condition and its future management.
Religion and belief	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Sex	Negative	National Stroke Association noted that statistics showed that males have a higher risk of having a stroke. Therefore returning the service back to its delivery prior to summer 2013 would have a potentially negative impact across Northern Lincolnshire.
Sexual orientation	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Deprivation	Neutral	It should be noted that deprivation cuts across Northern Lincolnshire. The low number of people with access to private transport is well documented, especially in the context of accessing services. This is exacerbated by the rural nature of the area and poor public transport. In North East Lincolnshire 28.3% of children are in poverty and in North Lincolnshire the figure is 21.0%. In view of the large demographic areas both SGH and DPoW service serves, and the associated deprivation within North East Lincolnshire in particular, the need to ensure children and families can access appropriate healthcare is paramount. Rotating surgical services either entirely or by speciality will undoubtedly cause access to the appropriate healthcare an issue for some families. Consideration needs to be given to the potential increase in families being unable to access services if they are not local to them.
Human rights	Negative	Rotational training programme with tertiary providers may result in tertiary providers not being able to offer enough procedures to NL&G surgeons to provide the critical mass required.

7.5 Evaluation criteria assessment

The programme board undertook an evaluation criteria scoring exercise, taking into consideration the above benefits and risks and the views of the local clinical community. A summary of the scoring is included below:

Table 19 – Evaluation scoring for option 3 (rotational training programme with tertiary providers)

Criteria	Score	Rationale
Quality	118	This was deemed a safer option as the tertiary provider would be offering clinical leadership for this cohort of patients, but that the service would still be local.
Access	36	This would be more positive for patients as they would not need to travel for their surgery.
Affordability	16	This would incur costs as the staff would need to be back-filled while they are on rotation.
Deliverability	40	This would be deemed more acceptable publically, as the service would still be available on both sites.
Total	210	

8. Option 4 – Decommission the local service and send all children's surgery to tertiary centres

8.1 Assumptions

This option makes the following assumptions:

- All children's surgery services will be decommissioned locally
- Patients will travel to the tertiary provider (e.g. Sheffield Children's Hospital) for their surgery
- There will be no change to outpatient service provision

8.2 Risks / issues

The risks and issues associated with this option are outlined below:

Table 20 – Risks and issues of option 4 (decommission local service)

Category	Risk / Issue	RAG	Mitigation
Quality & safety	Patients (children) may still attend local A&E departments with problems that require emergency surgery. If there is no local surgical service patients may be required to be transferred between local and tertiary sites.	Amber	Establish protocol to ensure that ambulances take presenting children to the relevant tertiary centre if it is likely they may require surgery. For those patients who do not have obvious symptoms a protocol will be require to transfer them to the appropriate site if required.
Access	Public may find an off-site centralised service less acceptable. They have raised concerns over transportation and access if services are moved. This would incur additional travel for some patients. Particular concerns have been raised about access to services in Hull and the cost of the Humber Bridge.	Amber	The case for change should be clearly communicated, and the feedback from the large number of patients and public who said they would be happy to travel further for higher quality care.
Access	Both areas within Northern Lincolnshire have a deprived populations and pockets of communities with low incomes. This could be seen to disadvantage deprived populations.	Amber	Support with travel costs is available for certain people that meet the criteria for subsidy or refund. This could be reviewed to be more inclusive.
Affordability	This will reduce income to the acute trust as the tariff will follow the patient to the tertiary provider.	Green	Use the reduction in surgical volumes to support a theatre capacity review, either reduce theatre lists or use that capacity for other specialities.
Affordability	There could be a tertiary premium applied to the tariff by the tertiary provider. Commissioners are currently required to reduce their costs within current allocations.	Amber	Negotiate rates with the tertiary provider to avoid additional costs to the commissioners.

8.3 Benefits

Benefits of this option are shown below:

Table 21 – Benefits of option 4 (Decommission local service)

Category	Benefit
Quality & safety	Children would receive optimal care from staff who meet all the required competency requirements to work within children's surgery.
Quality & safety	Patient safety would be assured by providing care from tertiary centres.

Category	Benefit
Deliverability	This would allow NLaG to focus their resources on other higher volume activities and reduce pressure on the current service.

8.4 Equality Impact Assessment

The impact on people with protected characteristics can be seen below:

Table 22 - Assessment of the impact on people with protected characteristics

Protected characteristic	Impact	Nature of impact
Age	Negative	Children patients may still attend local A&E departments with problems that require emergency surgery. If there is no local surgical service patients may be required to be transferred between local and tertiary sites. However North East Lincolnshire has 38.2% of the population of residents in the most deprived quintile and in North Lincolnshire the figure is 19.6%, therefore locating the service outside of Northern Lincolnshire would present a risk to this cohort of residents.
Disability	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Gender reassignment	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Marriage and civil partnership	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Pregnancy and maternity	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients.
Race	Neutral	Potential negative impact for service users for whom English is not their first language and may have issues understanding and retaining information about their condition and its future management.
Religion and belief	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Sex	Negative	National Stroke Association noted that statistics showed that males have a higher risk of having a stroke. Therefore returning the service back to its delivery prior to summer 2013 would have a potentially negative impact across Northern Lincolnshire.
Sexual orientation	Neutral	Potential negative impact for the population in general, however there is currently no data gathered to monitor the impact on this cohort of patients
Deprivation	Negative	It should be noted that deprivation cuts across Northern Lincolnshire. The low number of people with access to private transport is well documented, especially in the context of accessing services. This is exacerbated by the rural nature of the area and poor public transport. In North East Lincolnshire 28.3% of children are in poverty and in North Lincolnshire the figure is 21.0%. In view of the large demographic areas both SGH and DPoW service serves, and the associated deprivation within North East Lincolnshire in particular, the need to ensure children and families can access appropriate healthcare is paramount. Centralising surgical services either entirely or by speciality will undoubtedly cause access to the appropriate healthcare an issue for some families. Consideration needs to be given to the potential increase in families being unable to access services if they are not local to them.
Human rights	Positive	Decommissioning the local service and sending all children's surgery to tertiary centres would still allow the patient (children) to attend local A&E departments with problems that require emergency surgery. If there is no local surgical service patients may be required to be transferred between local and tertiary sites. Support for travel costs is available for certain people that meet the criteria for subsidy or refund. Option 4 would therefore provide a more positive impact in relation to Human rights and access to treatment as long as transport measures were put in place for the cohort of deprived population to enable them to gain access to the site

8.5 Evaluation criteria assessment

The programme board undertook an evaluation criteria scoring exercise, taking into consideration the above benefits and risks and the views of the local clinical community. A summary of the scoring is included below:

Table 23 – Evaluation scoring for option 4 (Decommission local service)

Criteria	Score	Rationale
Quality	145	This scored highly from a safety and quality perspective as specialist surgeons would be undertaking the procedures.
Access	24	This would require patients to travel off site for their surgery.
Affordability	24	If capacity could be identified within the tertiary centre it was assumed that this would not require significant financial investment.
Deliverability	72	It was assumed that this would be very attractive to staff working at the tertiary centre, and would relieve pressure on the local services, creating theatre and ward capacity that could be used on other services.
Total	265	This scored highest out of the options appraised.

9. Conclusion and recommendation

This options appraisal sets out the options, risks and benefits for children's surgery within Northern Lincolnshire as proposed by the provider clinical teams. The programme board have reviewed this work, and undertaken an evaluation criteria scoring exercise to form a preferred option for the future of the service.

The summary scores can be seen below:

Table 41 – Summary evaluation scoring

	Option 1	Option 2	Option 3	Option 4
Quality	72	45	118	145
Access	36	24	36	24
Affordability	40	16	16	24
Deliverability	48	16	40	72
Total	196	101	210	265

Through consideration of these options the programme board felt these options did not present sufficient solutions to the problems identified by the provider clinical teams, and that there were other options available. The programme board felt that two additional options should be considered before making a recommendation for changing the service:

- Centralise the children's surgery on SGH site
- Centralise children's surgery on DPOW site

The Clinical Senate will be approached to discuss options with the paediatric clinical teams to ensure that proposals are robust and will offer a safe alternative to the patients of Northern Lincolnshire.

It is recommended that further work be undertaken to scope out these options and complete the business case content for this options appraisal, and that this work be combined with a further period of public engagement.

The Council of Members and Governing Bodies are asked to review and endorse this course of action.

7. Appendix Log

Appendix 1 – NLaG Business Case for Children's surgery – May 2014

Appendix 2 – Evaluation Criteria Process

Appendix 3 – Equality Impact Assessment for Children's surgery – May 2014

Appendix 4 – Evaluation Criteria Assessment for Children's surgery – May 2014