Hospital Services Programme: Report to Governing Bodies
Annex E

Approach to fixed points

1. Purpose

1.1. The Hospital Services Review recommended that the South Yorkshire and Bassetlaw and North Derbyshire (SYB(ND)) system should look at the configuration of hospital services for maternity, paediatrics and emergency out of hours GI bleeds. The Review recommended looking at making changes to the clinical model on 1 or 2 sites for maternity and paediatrics, and moving to having out of hours GI bleed services on 3-4 sites.

1.2. Work was taken forward with the Clinical Working Groups to look at a range of clinical models, and identify the implications of applying these to different sites in SYB(ND).

1.3. In taking forward the modelling, commissioners needed to

- Confirm and agree how options will be assessed against each other (evaluation criteria)
- Agree whether they wished to rule out any sites altogether, and say that the system will definitely not make changes to the clinical model on those sites (fixed points).

1.4. Commissioners were asked to give their views on this in December 2018. All the commissions involved (Barnsley, Bassetlaw, Doncaster, North Derbyshire, Rotherham and Sheffield) agreed the approach outlined below, agreeing to designate Sheffield Children's Hospital as a fixed point for paediatrics, and Sheffield Teaching Hospital for maternity services.

2. Evaluation criteria

2.1. The evaluation criteria for the configuration options were developed during the Hospital Services Review, based on prioritisation by system leaders, clinicians, members of the public and people from the seldom heard groups.

2.2. They were reviewed during the autumn 2018 to make sure that issues which had been raised by Governing Bodies, Boards and members of the public in relation to the Hospital Services Review and the Strategic Outline Case were captured within the evaluation criteria.

2.3. A small number of amendments were made which were agreed by Collaborative Partnership Board on 19th October 2018, and reviewed by clinicians in Clinical Working Groups.

2.4. Following agreement by the CPB the evaluation criteria have also been discussed in public forums such as the Travel and Transport Advisory Panel.

2.5. Some very small amendments were made following the CPB e.g. to re-order the points (putting quality at the top, in response to clinician feedback), to clarify some points (e.g. to make it clear that the contribution to closing the financial gap will be assessed on a net basis) and to correct some typographical errors.

2.6. The final agreed set of criteria (figure 2) was agreed by commissioners in January 2019:

Figure 2: Final agreed evaluation criteria

Criterion	*Overarching Question*	*Dimensions*
Quality	Does the option optimise the quality of care by promoting delivery of national good practice and guidance, and contribute to maintained or improved outcomes?	• Promoting the delivery of national guidance, such as around safe staffing and evidence-based practice • Extent to which the model promotes sustainable provision of high-quality care for patients receiving their services within SYB • Extent to which the model ensures that patients are not disadvantaged if they need to travel outside of SYB for their care
Workforce	Does the option ensure there is a sustainable workforce of the right number and skill set?	• Number of staff required compared with likely available workforce • Impact on opportunities for training and skills development • Impact on reliance on locum / temporary staff
Affordability	Does the option cost no more than the current service?	• Running costs of the system compared with the current • Level of transition costs required • Level of capital costs required • Net contribution of the option to closing the financial gap identified in the STP plan
Access	Can patients access the right service, in the right place, in the right time?	• Impact on travel times to services by blue light, normal driving times, and public transport, for patients, carers and relatives • Extent to which the model mitigates any risks associated with transferring patients presenting either at home or at another site • Could the option increase health inequalities across SYB e.g. by limiting access for lower socioeconomic groups, their carers and relatives • Extent to which the model keeps outpatient, ambulatory and daycase activity local • Extent to which the model supports shifting care out of acute hospitals closer to home, where appropriate • Extent to which the model is resilient to fluctuations in demand • Extent to which the model supports choice for patients
Interdependencies	Are the necessary supporting services appropriately available?	• Interdependent services that need to be provided onsite are available onsite • There are formal links to interdependent services that do not have to beprovided onsite

3. Fixed sites

3.1. Methodology

3.1.1. In looking at changes to clinical models, there are large numbers of potential clinical models, which could be applied to large numbers of sites.

3.1.2. CCG Accountable Officers said in the November meeting of the ICS Executive Steering Group that they wish to consider a wide range of options, in order to ensure that the process was fair.

3.1.3. However, commissioners also said that they would wish to rule out sites where it is very obvious that there will be no change, to avoid spending time and resource on unworkable options.

3.1.4. It is legally possible as part of the evaluation approach to identify sites where there is wide consensus that the clinical model should not change. These are known as ‘fixed sites.’ Systems can designate fixed sites where the evidence is very clear, and fixing them is “self-evident”.

3.1.5. The Hospital Services programme team reviewed a number of reconfiguration processes around the country. They found several criteria that were frequently used to justify identifying a site as ‘fixed’ (see annex A). These were the levels of

activity, which dictated amongst other things the cost of capital; the number of interdependent services; the condition of the estate; geographical position; and self-selection.

3.1.6. In a meeting of the JCCCG on 28th November, commissioners stated that the criteria that they considered most relevant to South Yorkshire and Bassetlaw, and North Derbyshire, were:

- **Levels of activity, and thus the capital costs** of reproviding services elsewhere. The availability of capital in SYB(ND) is very constrained so options which would involve reproviding services for particularly high numbers of patients should be ruled out. These options would also affect the highest numbers of patients.

- **Interdependencies.** SYB(ND) contains some sites which provide high complexity tertiary services which are interdependent with maternity, paediatrics or gastroenterology. These would also have to be reprovided, further increasing costs and the impact of any move.

3.1.7. Both of these criteria appear within the existing SYB(ND) evaluation criteria, identified above.

3.1.8. Commissioners noted that activity levels were less key for GI bleeds, from a capital perspective. The numbers out of hours were so low that the capital impact would be minimal. We might still wish to avoid options which impacted on greater numbers of patients.

3.1.9. The JCCCG considered whether **geographic location** should be used to fix sites. Commissioners considered that, while access will be an important criterion for evaluating options, there were no sites at present where travel to the nearest alternative site had been considered by commissioners or providers to be clinically unsafe. Therefore it was not considered relevant while setting fixed sites.

3.1.10. The JCCCG noted that the **condition of the current estate** was not a major concern for SYB(ND), and that **self-selection** would not ensure that decisions were taken in the best interests of the population.

3.2. **Recommendations on fixed points**

3.2.1. Annex D shows the analysis of the sites in SYB(ND) against the three evaluation criteria of levels of activity (as a proxy for capital costs), and clinical interdependencies and estates / cost of capital.

3.2.2. Based on the numbers presented in Annex D, there were some sites which stood out clearly from the rest:

- **Maternity**: In 2017-18 Sheffield Teaching Hospitals (the Jessop Wing) had 6,723 births per year, more than twice that of the next largest unit (3,297 at Doncaster Royal Infirmary). In addition it has large numbers of interdependent specialist services which are not provided elsewhere in SYB(ND).

- **Paediatrics**: Sheffield Children's Hospital had 10,043 inpatient stays in 2016-17 (approximated from reference cost data), considerably larger that of the next largest unit at 4,838. The 2017-18 HES data shows a

similar pattern, with 3,404 long stay inpatient stays at SCH compared with 2,313 across the next largest trust (Doncaster and Bassetlaw combined). In addition it has large numbers of interdependent specialist services which are not provided elsewhere in SYB(ND).

- **Out of hours GI bleeds**: On activity, Sheffield Teaching Hospitals and Doncaster Royal Infirmary both treat more GI bleeds than other trusts. STH also undertakes more complex surgeries which may give rise to a GI bleed. However the levels of activity for out of hours emergency bleeds which require transfer are low, and so the Hospital Services Steering Group did not consider that activity was a sufficient driver to fix either site.

  On interdependencies, STH and DRI offer vascular Interventional Radiology out of hours, which was identified by the Steering Group as the main interdependency. Since this was only one interdependent service the Steering Group did not consider it a sufficient driver to fix a site. Therefore we propose not to fix any sites for out of hours GI bleeds.

3.2.3. The CCGs therefore agreed to fix STH for maternity and SCH for paediatrics, and not to fix any sites for GI bleeds.

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Annex A

Criteria used to identify fixed sites in other reconfigurations

ACTIVITY	ESTATES / CAPITAL	GEOGRAPHIC LOCATION	SELF SELECTION
✓ Initial options selected based on sites' ability to meet **guideline levels of activity** for stroke care (Kent and Medway)	✓ Some sites fixed due to **significant capital expenditure** required to move the service - c.£100m (Mid & South Essex)	✓ Fixed sites on the **periphery** of the region for optimal spread of access for patients (NW London) ✓ Fixed **geographically isolated** hospital as hybrid elective and emergency hospital – 45 and 60 minute drive from alternative sites in Poole and Bournemouth respectively (Dorset)	✓ Initial options developed by requesting trusts to **submit proposals to host** consolidated elective centre (SE London)
x Ruled out options that would not meet **clinical guidelines on safe activity and staffing levels** (Oxfordshire)	x Ruled out sites where the **bed base could not be expanded** due to estates limitations (Cumbria) x Ruled out hospitals that **did not have the scale** to provide major acute care – 600-1,000 beds required (NW London) x One site assessed as no longer suitable to provide long-term inpatient care due to **poor estates** condition, therefore was a fixed point for closure (Cumbria)		x Ruled out sites that **did not submit a proposal** to host the consolidated elective centre - assuming to volunteer their service for potential closure/transfer (SE London)

CLINICAL INTERDEPENDENCIES

x Ruled out options where the capital cost of reproviding associated specialist services (plastic surgery, radiotherapy) would be too high (Mid and South Essex)

Annex D

Recommendations against the criteria for fixed sites:

Commissioners identified two criteria which were of the greatest relevance when assessing fixed sites:

- Levels of activity, as a proxy for cost of capital
- Interdependencies

Analysing the activity data

The Hospital Services team have reviewed the activity levels in each trust. Depending on the clinical model, not all of the activity would be transferred; what the activity levels show is the **comparative** sizes of the units and thus the approximate, comparative impact of changing the relative sites.

The comparative size of the units indicates the comparative level of reprovision that would be required. It thus indicates the comparative scale of capital costs that the system would face in reproviding that capacity elsewhere. The specific capital costs have not been modelled at this stage as they would depend on the exact implications on the receiving site.

GI bleeds

For GI bleeds, the levels below indicate all activity rather than the number of bleeds overnight, but they give an indication of the relative scale of GI bleed activity on the sites.

Capital costs are a less significant issue for GI bleeds since the number of out of hours transfers is low. The Steering Group discussed whether comparative activity levels would still be relevant because of the indication of comparative impact on numbers of patients, but concluded that the numbers were small overall and so this was not a sufficiently 'self-evident' reason for fixing a site.

Paediatrics

For paediatrics, the analysis presents two years' worth of data in order to capture the comparative size of the units prior to changes to the clinical model being introduced at Bassetlaw. The analysis for the two years is presented using different data (reference costs rather than HES data which was not provided for 2016/17) and has been adjusted to compensate for the change to the Bassetlaw model in January 2017.

The pattern of the comparative sizes of the units remains clear.

Analysing the data on interdependent services

There are two types of interdependent services:

- Some interdependent services are common to the majority of District General Hospitals, and would have to move or be adjusted if changes were made. For example, most paediatrics services are interdependent with neonatology services since most DGHs currently have a single rota of consultants covering both services. The team proposes that these interdependent services should not be seen as a reason for establishing a fixed site because they are widespread across most sites.

- **There are some interdependent services which are highly specialised**, and are currently provided in only one or two sites in SYB(ND). These have been identified as reasons for establishing a fixed site because they are essential and unusual, and would require specialist reprovision.

Maternity

Figure 6: levels of activity in maternity services

Activity type	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rotherham	Sheffield Children's	Sheffield Teaching
16/17 Reference Costs **	3,012	2,845	1,507	3,391	2,678	N/A	6,924
17/18 Reference Costs	2,937	2,772	4,767		2,221	N/A	6,614
17/18 HES ***	2,777	*	1,509	3,297	2,492	N/A	6,723

Notes: * Data not yet provided; ** Final numbers used for the HSR May 2018 *** Awaiting data validation from trusts

Figure 7: interdependencies in maternity services

	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rotherham	Sheffield Children's	Sheffield Teaching
Specialist / specialised services on-site	Neonatology Level 2	Neonatology Level 2	Neonatology Level 1	Neonatology Level 2	Neonatology Level 2		Neonatology Level 3 for severely premature babies Fetal medicine unit Advanced maternal medicine – for example: • Sub-specialist haematology clinics (anti-clotting teams) • Cardiac clinic • Endocrine • Pulmonary vascular service • Intrapartum care of complex patients • Mothers with significant medical co-morbidities e.g. cardio-thoracic

Paediatrics

Figure 8: levels of activity in paediatrics services

Source of data	Activity type	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rotherham	Sheffield Children's	Sheffield Teaching
16/17 Reference Costs **	All inpatient stays	3,217	4,838	1,493	4,277	3,833	10,043	N/A
	Long-stay (IP)	507	883	260	1,107	1,675	2,059	N/A
	Short-stay (IP)	2,710	3,955	1,233	3,170	2,158	7,985	N/A
17/18 HES ***	All inpatient stays	3,490	*	1,330	4,594	2,365	6,675	N/A
	Long-stay (IP)	882	*	58	1,489	824	3,404	N/A
	Short-stay (IP)	2,608	*	1,272	3,105	1,541	3,271	N/A

Notes: * Data not yet provided; ** Final numbers used for the HSR May 2018 *** Awaiting data validation from trusts

Figure 9: interdependencies in paediatrics services

	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rother-ham	Sheffield Children's	Sheffield Teaching
Specialist / specialised services on-site	1 paediatric HDU bed	2 paediatric HDU beds		2 Paediatric HDU beds	1 paediatric HDU bed	Paediatric Intensive Care Unit Paediatric trauma Specialist paediatric services (not provided elsewhere in SYB(ND). For example, specialist: - cardiology - endoscopy - tracheostomy - rigid bronchoscopy - neurosurgery - radiology	N/A

Gastroenterology

Figure 10: levels of activity in Gastroenterology services

Activity type (all hours)	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rotherham	Sheffield Children's	Sheffield Teaching
16/17 Reference Costs **	436	517	1,049		392	N/A	1,132
17/18 Reference Costs	383	505	1,002		373	N/A	995
17/18 HES ***	252	*	104	907	375	N/A	911

Notes: * Data not yet provided; ** Final numbers used for the HSR May 2018 *** Awaiting data validation from trusts

Figure 11: interdependencies in Gastroenterology services

Specialist / specialised services on-site	Barnsley	Chesterfield	Bassetlaw	Doncaster	Rotherham	Sheffield Children's	Sheffield Teaching
		Interventional radiology in-hours		Interventional radiology out of hours			Intervention al radiology out of hours