

Integ	rated Impa	ct Assessment Report	t for Service	e Specifications		
Service Specification Reference Number	1782	1782				
Service Specification Title		Open Fetal Surgery to treat fetuses with 'congenital open spina bifida', (the main types of which are myelomeningocoele and myeloschisis) (Children)				
Lead Commissioner	Bernie Stock	Bernie Stocks Clinical Lead Tim Watts			Tim Watts	
Finance Lead	Jazz Nandra		Analytical Lead		Jazz Nandra	
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A4 Patient Pathway		B4 Collaborative Commissioning		C4 Overall cost impact of this service specification to the NHS as a whole		
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## About this Impact Assessment: instructions for completion and explanatory notes

- Each section is divided into themes.
- Each theme sets out a number of questions.
- All questions are answered by selecting a drop down option or including free text.
- Free text boxes are provided to enable succinct relevant commentary to be added which explains the rationale for response or assumption. Please limit responses to 3 sentences of explanatory text.
- Data in this document is either drawn from one of the relevant service specification documents or a source for the information is provided.
- Where assumptions are included where data is not available, this is specified.

Section A - Activity Impact			
A1 Current Patient Population & Demography / Growth			
A1.1 Prevalence of the disease/condition.	England each year with will not be suitable for	pical estimates, approximately 100 babies are born in th myelomeningocoele and myeloschisis, of which 90 prenatal surgery and up to 10 will. <i>ification Proposition section 3.2</i>	
A1.2 Number of patients currently eligible for the service according to the proposed service specification commissioning criteria.	Approximately 10 pati described in A1.1) <i>Source:</i> Specification Please specify	ents will be eligible (i.e. 10% of the patient cohort as Working Group	
A1.3 Age group for which the service is proposed according to the service specification commissioning criteria.	Other Please specify Feto-maternal		
A1.4 Age distribution of the patient population eligible according to the proposed service specification commissioning criteria	See A1.3 above Source: Specification Please specify Click here to enter tex		
A1.5 How is the population currently distributed geographically?	North	egional distribution by %:	
	Midlands & East	enter %	

	London	enter %	
	South	enter %	
	Please specify	<i>ce specification prop</i> / ographic element to	
A2 Future Patient Population & Demography			
A2.1 Projected changes in the disease/condition epidemiology, such as incidence or prevalence (prior to applying the new service specification) in 2, 5, and 10 years?	,	here to enter text. ce specification prop	position section 3.1
A2.2 Are there likely to be changes in demography of the patient population and would this impact on activity/outcomes?	No Please specify Click here to e Source: Servi	enter text.	position section 6/other
A2.3 Expected net increase or decrease in the number of patients	YR2 +/-	7	
who will be eligible for the service, according to the proposed service specification commissioning criteria, per year in years 2-5 and 10?	YR3 +/-	0	
	YR4 +/-	0	
	YR5 +/-	0	
	YR10 +/-	0	
	Due to part ye	ar effect.	

	-
specific population? If not please justify the growth assumptions made.	Source: Service specification proposition section 3.2
	Yes
	Click here to enter text.
A3 Activity	
A3.1 What is the purpose of new service specification?	Provide service specification for a new service approved to be
	commissioned by NHS England for the first time in accordance with PSSAG / other recommendation
	*PSSAG (Prescribed Specialised Services Advisory Group)
	Please specify
	Click here to enter text.
A3.2 What is the annual activity associated with the existing pathway for the eligible population?	Circa 100 babies receive post-natal repair for spina bifida in England per annum, but only up to 10 women and their fetuses would meet the inclusion criteria set out in the specification, which is evidence based, including the MOMs trial criteria NEJM 2011.
	<i>Source:</i> Specification Working Group, Data from current European Open Fetal Surgery Centres.
	Please specify
	Click here to enter text.
A3.3 What is the estimated annual activity associated with the	10 in England
proposed service specification proposition pathway for the eligible	Source: Specification Working Group.
population?	Please specify
	Click here to enter text.

A4 Patient Pathway	
A4.1 <b>Patient pathway</b> Describe the current patient pathway and service.	Pre-natal repair in Europe. Pathway is similar to proposed pathway, with initial and follow on outpatient review and any additional inpatient treatment in England. Source: Specification Working Group.
A4.2. What are the current service access and stopping criteria?	Babies born with a diagnosis of myelomeningocele require transfer to a paediatric neurosurgical centre. Surgery to repair the myelomeningocele should be carried out within 48 hours of birth. Surgery is offered to all infants with this diagnosis unless there are severe life threatening co-morbidities that mean the child is unlikely to survive the neonatal period. Source: Specification Working Group
<ul> <li>A4.3 What percentage of the total eligible population are:</li> <li>a) Referred</li> <li>b) Meet any existing criteria for care</li> <li>c) Considered to meet any existing exclusion criteria</li> </ul>	If not known, please specify Click here to enter text. a) 100% b) Up to 10 patients = up to 10% c) 100% of b) Source: Specification Working Group
<ul> <li>A4.4 What percentage of the total eligible population is expected to:</li> <li>a) Be referred to the proposed service</li> <li>b) Be eligible for care according to the proposed criteria for the service</li> <li>c) Take up care according to the proposed criteria for the service</li> <li>d) Continue care according to the proposed criteria for the service?</li> </ul>	If not known, please specify n/a a) 100% b) Up to 10% c) 100% of b) d) 100% of c) e) Source: Specification working Group.

A4.5 Specify the nature and duration of the proposed new service or intervention.	Time limitedFor time limited services, specify frequency and/or duration.Presentation and identification of the condition occurs circa 19+0 weeksgestation at the anomaly scan. If the woman meets the criteria and iswilling to proceed with surgery on her fetus, and her fetus also meets theinclusion criteria, surgery must take place before 25.6 weeks gestation.Source: Specification Working Group: MOMS Trial 2011. Leuven Clinical
	Source: Specification Working Group; MOMS Trial 2011, Leuven Clinical team.

## A5 Service Setting

A5.1 How is this service delivered to the patient?	Select all that apply:	
	Emergency/Urgent care attendance	
	Acute Trust: inpatient	$\boxtimes$
	Acute Trust: day patient	$\boxtimes$
	Acute Trust: outpatient	$\boxtimes$
	Mental Health provider: inpatient	
	Mental Health provider: outpatient	
	Community setting	
	Homecare	
	Other	
	Please specify: Click here to enter text.	

A5.2 What is the current number of contracted providers for the eligible population by region?	NORTH	0	
	MIDLANDS & EAST	0	
	LONDON	0	
	SOUTH	0	
A5.3 Does the proposition require a change of delivery setting or capacity requirements?	yes Please specify:		
	This service specification identify a small number o	f (one to two) Fetal perience to undert	der selection process to Surgery Centres with the ake open pre-natal surgery.
A6 Coding			

## A6 Coding

A6.1 Specify the datasets used to record the new patient pathway	Select all that apply:			
activity.	Aggregate Contract Monitoring *	$\boxtimes$		
*expected to be populated for all commissioned activity	Patient level contract monitoring	$\boxtimes$		
	Patient level drugs dataset			
	Patient level devices dataset			
	Devices supply chain reconciliation dataset			
	Secondary Usage Service (SUS+)	$\boxtimes$		
	Mental Health Services DataSet (MHSDS)			
	National Return**	$\boxtimes$		

	Clinical Database**	$\boxtimes$
	Other**	
	**If National Return, Clinical database or other clinical database will be established.	r selected, please specify: A
A6.2 Specify how the activity related to the new patient pathway will	Select all that apply:	
be identified.	OPCS v4.8	$\square$
	ICD10	
	Service function code	
	Main Speciality code	
	HRG	$\boxtimes$
	SNOMED	
	Clinical coding / terming methodology used by clinical profession	$\square$
A6.3 Identification Rules for Drugs: How are any drug costs captured?	Not applicable         If already specified in the current NHS England Drug / Devices List, please specify drug name and indication for all that apply:         Click here to enter text.         If drug(s) NOT already been specified in the current NHS England Drug List please give details of action required and confirm that this has been discussed with the pharmacy lead:         Click here to enter text.	
A6.4 Identification Rules for Devices:	Not applicable	
How are device costs captured?	If device(s) covered by an existing category of HCTED please s	

	Device Category (as per the National Tariff Payment System Guidance) for all that apply: Click here to enter text. If device(s) not excluded from Tariff <b>nor</b> covered within existing National or Local prices please specify details of action required and confirm that this has been discussed with the HCTED team. Click here to enter text.
A6.5 Identification Rules for Activity:	Already captured by an existing specialised service line (NCBPS
How are activity costs captured?	code) within the PSS Tool but needs amendment
	If activity costs are already captured please specify the specialised service code and description (e.g. NCBPS01C Chemotherapy).
	NCBPS23M -Paediatric Neurosciences.
	If activity costs are already captured please specify whether this service needs a separate code. Choose an item.
	If the activity is captured but the service line needs amendment please specify whether the proposed amendments have been documented and agreed with the Identification Rules team.
	The fetal surgery indicated in this specification currently meets the broad criteria of the Paediatric Neurosurgery specialised service line and therefore, would need to be included. The information team have been requested to make the amendment by the PSS Lead.
	If the activity is not captured please specify whether the proposed identification rules have been documented and agreed with the Identification Rules team. Choose an item.
A7 Monitoring	
A7.1 Contracts	Yes - population of clinical databases

Specify any new or revised data flow or data collection requirements, needed for inclusion in the NHS Standard Contract Information Schedule. Please identify any excluded drugs or devices relevant to the service and their current status with regard to NHS England specialised services commissioning.	Please specify
A7.2 Business intelligence	No
Is there potential for duplicate reporting?	If yes, please specify mitigation: Click here to enter text.
A7.3 Contract monitoring	Yes
Is this part of routine contract monitoring?	If no, please specify contract monitoring requirement:
A7.4 Dashboard reporting	No
Specify whether a dashboard exists for the proposed service?	If yes, specify how routine performance monitoring data will be used for dashboard reporting.
	Click here to enter text.
	If no, will one be developed?
	Yes
A7.5 NICE reporting	Νο
Are there any directly applicable NICE or equivalent quality standards which need to be monitored in association with the new service specification?	If yes, specify how performance monitoring data will be used for this purpose.
Section B	- Service Impact

B1 Service Organisation	
B1.1 Describe how the service is currently organised? (i.e. tertiary centres, networked provision etc.)	Pre-natal surgery is funded by the DHSC in mainland Europe under the S2 arrangement. Source: NHS England – The Manual
B1.2 Will the specification change the way the commissioned service is organised?	Yes         Please specify:         NHS England will undertake a provider selection process to determine one to two providers with appropriate expertise and infrastructure.         Source: required
B1.3 Will the specification require a new approach to the organisation of care?	Implement a new model of carePlease specify:District General Hospital Local Maternity Units refer to Regional FetalMedicine Units as now, which will undertake preliminary diagnostics andthen refer to the 1-2 nationally-commissioned Fetal Surgery Centre (FSC)specialist units for a clinical opinion as to whether the woman and herfetus meet the inclusion criteria on the basis of initial and subsequent testresults, further tests and physical assessment. Surgery then follows if allinclusion criteria are met and the woman consents.
B2 Geography & Access	
B2.1 Where do current referrals come from?	Select all that apply:
	GP 🗆
	Secondary care

	Tertiary care     Image: Constraint of the constraint of t
B2.2 What impact will the new service specification have on the sources of referral?	No impact Please specify: Click here to enter text.
B2.3 Is the new service specification likely to improve equity of access?	No impact Please specify: Click here to enter text. Source: Equalities Impact Assessment
B2.4 Is the new service specification likely to improve equality of access and/or outcomes?	No impact Please specify: <i>Source: Equalities Impact Assessment</i>
B3 Implementation	
B3.1 Will commissioning or provider action be required before implementation of the proposition can occur?	Procurement actionPlease specify:A provider selection process will be carried out to invite applications from providers who meet a set of essential criteria including expertise, experience and relevant infrastructure.

B3.2 Time to implementation:	<u>Yes - go to B3.3</u>
Is a lead-in time required prior to implementation?	If yes, specify the likely time to implementation: Up to four weeks.
B3.3 Time to implementation:	<u>No - go to B3.4</u>
If lead-in time is required prior to implementation, will an interim plan for implementation be required?	If yes, outline the plan:
B3.4 Is a change in provider physical infrastructure required?	No
	Please specify:
	The providers who would be in scope for this service would already have the expertise, the clinical record of undertaking this procedure, be able to demonstrate appropriate outcomes and have the physical infrastructure in place such as appropriate outpatient facilities, inpatient wards, theatres and high level diagnostics.
B3.5 Is a change in provider staffing required?	Yes
	Please specify:
	The required staff should already be employed in the units which would be interested in providing this service, in order to meet the requirement to have pre-existing experience and expertise although the whole time equivalents may need to increase.

B3.6 Are there new clinical dependency and/or adjacency	Yes
requirements that would need to be in place?	Please specify:
	a) appropriate caseload to maintain expertise in the treatment of the condition;
	b) Infrastructure - Co-located (all facilities on one site): fetal surgery clinic capacity, fetal MRI neuroradiology, neonatal intensive care unit (NICU), obstetric high dependency unit, adult intensive care unit, inpatient ward for the care of pregnant women which is staffed by midwives to monitor fetus and nurses, fetal medicine theatre lists, theatres. Fetal surgery will be undertaken in units which have a NICU on site.
	c) Equipment: technology for MDTs
	d) Staffing: Obstetrics; Fetal Medicine specialist with expertise in Fetal Surgery (an obstetrician who is a fetal medicine specialist with training in uterine surgery and in undertaking open fetal surgery for spina bifida repair); Fetal medicine; Fetal Surgery, Neonatal medicine (NICU); Paediatric neurosurgery; Paediatric neurodisability; obstetric anaesthetist with expertise in fetal anaesthesia, fetal neuroradiologist or paediatric radiologist comfortable with knowledge and skills of the developing brain and the early diagnosis of brain anomalies to review MRI, adult critical care unit.
B3.7 Are there changes in the support services that need to be in	No
place?	Please specify:
	All of the above components in B3.6 should already be in place
B3.8 Is there a change in provider and/or inter-provider governance required? (e.g. ODN arrangements / prime contractor)	No Please specify:
	Providers will be commissioned for the first time in England for this procedure.
B3.9 Is there likely to be either an increase or decrease in the	Choose an item.
	15

number of commissioned providers? If yes, specify the current and	d Please comp	lete the table:		
estimated number of providers required in each region	Region	Current no. of providers	Future State expected range	Provisional or confirmed
	North	0	0 to 1	select
	Midlands & East	0	0 to 1	select
	London	0	0 to 1	select
	South	0	0 to 1	select
	Total		Maximum of 1-2 units	select
	Please specif	Please specify:		
			i criteria, providers wil	l need to meet
B3 10 Specify how revised provision will be secured by NHS	essential crite units will be r involved.	eria and will serve equired because	n criteria, providers wil the whole of England of the very small numb	. No more that
B3.10 Specify how revised provision will be secured by NHS England as the responsible commissioner.	essential crite units will be r involved. Select all the	eria and will serve equired because at apply:	the whole of England of the very small numb	. No more that per of patients
	essential crite units will be r involved. Select all the	eria and will serve equired because at apply: and notification of	the whole of England of the very small numb	. No more that
	essential crite units will be r involved. Select all the Publication a specification	eria and will serve equired because at apply: and notification of	the whole of England of the very small numb	. No more that per of patients
	essential crite units will be r involved. Select all the Publication a specification Market inter Competitive	eria and will serve equired because at apply: and notification of vention required	the whole of England of the very small numb new service s to secure increase or	No more that ber of patients
	essential crite units will be r involved. Select all the Publication a specification Market inter Competitive decrease pre	eria and will serve equired because at apply: and notification of vention required selection process ovider configurati selection process	the whole of England of the very small numb new service s to secure increase or	No more that ber of patients
	essential crite units will be r involved. Select all the Publication a specification Market inter Competitive decrease pro	eria and will serve equired because at apply: and notification of vention required selection process ovider configurati selection process s	the whole of England of the very small numb new service s to secure increase or on	No more that ber of patients
	essential crite units will be r involved. Select all the Publication a specification Market inter Competitive decrease pro Price-based effectivenes Any qualified	eria and will serve equired because at apply: and notification of vention required selection process ovider configurati selection process s d provider	the whole of England of the very small numb new service s to secure increase or on	No more that ber of patients

	Procurem	ent	
	Other		
	Please spe		]
	-	rmed but there will be essential criteria.	
B4 Place-based Commissioning			
B4.1 Is this service currently subject to, or planned for, place-based	No		
commissioning arrangements? (e.g. future CCG lead, devolved commissioning arrangements, STPs)	Please spe	cify: to enter text.	
	Click here	to enter text.	
Section C	- Finance In	npact	
C1 Tariff/Pricing			
C1.1 How is the service contracted and/or charged?	Select all	that apply:	
Only specify for the relevant section of the patient pathway		Not separately charged – part of local or national ta	iffs 🗆
	Drugs	Excluded from tariff – pass through	
		Excluded from tariff - other	
		Not separately charged – part of local or national ta	iffs 🗆
	<b>D</b>	Excluded from tariff (excluding ZCM) – pass through	
	Devices		
		Excluded from tariff (excluding ZCM) – other	
		Excluded from tariff (excluding ZCM) – other Via Zero Cost Model	

		Paid entirely by National Tariffs	
		Paid entirely by Local Tariffs	$\boxtimes$
		Partially paid by National Tariffs	
	Activity	Partially paid by Local Tariffs	
		Part/fully paid under a Block arrangement	
		Part/fully paid under Pass-Through arrangements	
		Part/fully paid under Other arrangements	
C1.2 <b>Drug Costs</b> Where not included in national or local tariffs, list each drug or combination, dosage, quantity, <b>list</b> price including VAT if applicable and any other key information e.g. Chemotherapy Regime. NB discounted prices or local prices must not be included as these are subject to commercial confidentiality and must not be disclosed	Not applica	al surgery providers.	
are subject to commercial confidentiality and must not be disclosed. C1.3 <b>Device Costs</b> Where not included in national or local tariff, list each element of the excluded device, quantity, <b>list or expected</b> price including VAT if applicable and any other key information.	Not applica	able	
NB: Discounted prices or local prices must not be included as these are subject to commercial confidentiality and must not be disclosed.			
C1.4 Activity Costs covered by National Tariff List all the HRG codes, HRG descriptions, national tariffs (excluding	N∖A		

C1.5 Activity Costs covered by Local Tariff List all the HRGs (if applicable), HRG or local description, estimated average tariff, volume and any other key costs. Also indicate whether the Local Tariff(s) is/are newly proposed or established and if newly proposed how is has been derived, validated and tested.	forces factor	vered by local tariff estimated cost c£12.62k	plus market
C1.6 Other Activity Costs not covered by National or Local Tariff Include descriptions and estimates of all key costs.	•	en who meet the inclusion criteria have been ope for pre-natal surgery for a number of yea rrangement.	
C1.7 Are there any prior approval mechanisms required either during implementation or permanently?	No Please speci	y: Click here to enter text.	
C2 Average Cost per Patient			
C2.1 What is the estimated cost per patient to NHS England, in	YR1	£14.5K	
years 1-5, including follow-up where required?	YR2	£14.5K	
	YR3	£14.5K	
	YR4	£14.5K	
	YR5	£14.5K	
Are there any changes expected in year 6-10 which would impact		specify:	

C3.1 Specify the budget impact of the proposal on NHS England in relation to the relevant pathway.	Cost pressureThe cost pressure is related to the procedure being proposed.Year 1: £43.577K (Part year effect)Year 2: £14526KYear 5: £145.26KPlease specify:Click here to enter text.
C3.2 If the budget impact on NHS England cannot be identified set out the reasons why this cannot be measured.	Not applicable
C3.3 If the activity is subject to a change of commissioning responsibility, from CCG to NHS England, has a methodology for the transfer of funds been identified, and calculated?	Not applicable
C4 Overall cost impact of this service specification to the NHS a	s a whole
C4.1 Specify the budget impact of the proposal on other parts of the NHS.	Budget impact for CCGs: <u>Cost neutral</u> The specification is considered to be cost neutral. If the service specification is not approved, there would be additional longer term cost pressure which is likely to be higher than the cost of the service. Budget impact for providers: <u>Cost neutral</u> Please specify:

	The neurological and other outcomes for babies who receive this procedure are better than those who receive post-natal surgery instead due to stopping the deterioration of the nerve tissue by the amniotic fluid which would otherwise continue.
C4.2 Taking into account responses to C3.1 and C4.1, specify the budget impact to the NHS as a whole.	Cost neutralPlease specify:The life-long burden of care will be reduced following pre-natal surgery as compared to post-natal surgery due to: i) reduced need for shunting (40% v 82% for post-natal repair; reduced need for surgery for Chiari II malformation (1% v 5%; Walking independently on examination 42% v 21%); and mental development index. (Source: NEJM - MOMS trial 2011).
C4.3 Where the budget impact is unknown set out the reasons why this cannot be measured	Not applicable
C4.4 Are there likely to be any costs or savings for non-NHS commissioners and/or public sector funders?	Yes Please specify: Whilst the child will still have spina bifida, the life-long health, social support, education and other support costs to the child and their family are less as the child is able to function more normally.
C5 Funding	
C5.1 Where a cost pressure is indicated, state known source of funds for investment, where identified, e.g. decommissioning less clinically or cost-effective services.	CPAG Prioritisation Reserve

	pecification
C6.1 What are the material financial risks to implementing this service specification?	Not applicable.
C6.2 How can these risks be mitigated?	Not applicable
C6.3 What scenarios (differential assumptions) have been explicitly tested to generate best case, worst case and most likely total cost scenarios?	Not applicable
C6.4 What scenario has been approved and why?	Not applicable
C7 Value for Money	Dubliched quidence indicates convice exection has the notantial
C7 value for Money C7.1 What published evidence is available that the service is cost effective as evidenced in the evidence review?	Published evidence indicates service specification has the potential to be cost-effective
C7.1 What published evidence is available that the service is cost	
C7.1 What published evidence is available that the service is cost	to be cost-effective
C7.1 What published evidence is available that the service is cost	<ul> <li>to be cost-effective</li> <li>Please specify:         <ol> <li>MOMs trial NEJM March 17 2011 Vol 364, no 11. A randomised trial of prenatal versus postnatal repair of myelomeningocoele</li> <li>Evaluating the cost-effectiveness of prenatal surgery for myelomeningocoele: a decision analysis Werner et al, Ultrasound</li> </ol> </li> </ul>

Available pricing data suggests the service is lower cost compared to current/comparator treatment	
Available clinical practice data suggests the new service specification has the potential to improve value for money	
Other data has been identified	
No data has been identified	
The data supports a high level of certainty about the impact on value	
The data does not support a high level of certainty about the impact on value	
Please specify: Click here to enter text.	

## **C8 Non-Recurrent Costs**

C8.1 Are there non-recurrent revenue costs associated with this service specification?	No If yes, please specify and indicate whether these would be incurred or passed through to NHS England: Click here to enter text. If the costs are to be passed through to NHS England please indicate whether this has been taken into account in the budgetary impact. Choose an item.
C8.2 Are there any non-recurrent provider capital costs associated with the service specification?	No If yes, please specify and indicate with there is a separate source of funding identified (commissioners cannot reimburse capital costs). Click here to enter text.