

**Integrated Impact Assessment Report for Clinical Commissioning Service Specifications**

<b>Service Specification Reference Number</b>	1710		
<b>Service Specification Title</b>	Neurointerventional services for acute ischaemic & haemorrhagic stroke		
<b>Lead Commissioner</b>		<b>Clinical Lead</b>	
<b>Finance Lead</b>		<b>Analytical Lead</b>	
<b>Section A - Activity Impact</b>			
<b>Theme</b>	<b>Questions</b>	<b>Comments</b> (Include source of information and details of assumptions made and any issues with the data)	
A1 Current Patient Population & Demography / Growth	A1.1 What is the prevalence of the disease/condition?	<p>A1. 1</p> <p>There are approximately 80,000 stroke admissions in England per year. Those that require Neurointerventional procedures fall into two main groups:</p>	

	<p>A1.2 What is the number of patients currently eligible for the treatment under the proposed service specification?</p> <p>A1.3 What age group is the treatment indicated for?</p> <p>A1.4 Describe the age distribution</p>	<p>Ischaemic stroke: Currently, around 12% of all stroke patients receive intravenous thrombolysis and the majority of patients suitable for thrombectomy will come from this group.</p> <p>Haemorrhagic stroke: Approximately 15% of strokes are haemorrhagic and may require coiling or other interventional treatments for aneurysm.</p> <p>Aneurysmal subarachnoid haemorrhage (SAH) rate is approximately 80 per million population per annum</p> <p>A1.2  Approximately 8,000 people per year would fulfil the criteria for consideration for thrombectomy  In England around 2500 acute Subarachnoid Haemorrhage, aneurysm coiling's are performed &amp; around 300-400 other acute haemorrhagic stroke related interventions (angioplasty for vasospasm, ruptured AVM/AVF acute embolisation, venous sinus thrombosis intervention)</p> <p>A1.3 Adults</p> <p>A1.4</p>
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of the patient population taking up treatment?

The risk of having a stroke doubles every decade after the age of 55.

By the age of 75, 1 in 5 women and 1 in 6 men will have a stroke.

1 in 4 (26%) of strokes in the UK occur in people under 65 years old.

A1.5 What is the current activity associated with currently routinely commissioned care for this group?

A1.5

80,000 admissions per year for stroke with 8,000 of these being eligible for treatment with thrombectomy and 2,900 for haemorrhagic stroke or aneurysm. Coiling and other interventional treatments for haemorrhagic stroke is currently routinely commissioned. Thrombectomy is also now available in neuroscience centres.

A1.6 What is the projected growth of the disease/condition prevalence (prior to applying the new service specification) in 2, 5, and 10 years?

A1.6

Activity will not increase as a direct result of the service specification as the service is already commissioned. (any further funding requirements are associated with the thrombectomy policy and included in those finance assumptions) There is no anticipated growth in the numbers of people suffering a stroke as although the incidence is dropping in younger people due to the FAST campaign, however the population is aging. The population over 65 years is growing by approximately 1.7% per year. (increased incidence of stroke is

	<p>A1.7 What is the associated projected growth in activity (prior to applying the new service specification) in 2, 5 and 10 years?</p> <p>A1.8 How is the population currently distributed geographically?</p>	<p>associated with age)</p> <p>A1.7 A phased implementation commissioning plan is proposed to allow for development of services and specialists to perform thrombectomy. With 2017/18 being anticipated at 1,000 patients raising to 8,000 patients in years 5 and 6 when services become established with geographical 24/7 access.</p> <p>A1.8 The population of people suffering stroke is fairly evenly spread taking into account age population.</p>
<p>A2 Future Patient Population &amp; Demography</p>	<p>A2.1 Does the new service specification: / expand or restrict an existing treatment threshold / add an additional line / stage of treatment / other?</p> <p>A2.2 Please describe any factors likely to affect growth in the patient population for this intervention (e.g. increased</p>	<p>A2.1 The service specification supports more timely access to Neurointervention for haemorrhagic stroke and additionally secures access to thrombectomy.</p> <p>A2.2 Aging population as the incidence of stroke increases with age. However due to improved prevention the incidence in &lt;65 has been decreasing</p>

	<p>disease prevalence, increased survival).</p> <p>A 2.3 Are there likely to be changes in geography/demography of the patient population and would this impact on activity/outcomes? If yes, provide details.</p> <p>A2.4 What is the resulting expected net increase or decrease in the number of patients who will access the treatment per year in year 2, 5 and 10?</p>	<p>A2.3 No</p> <p>A2.4 Treatment for Haemorrhagic stroke will remain stable as this service is well established and this specification will allow more timely access for this cohort of patients, for thrombectomy numbers will increase as services set up from 1000 in year one to 8,000 in year 6 as per the policy proposal.</p>
<p>A3 Activity</p>	<p>A3.1 What is the current annual activity for the target population covered under the new service specification? Please provide details in accompanying excel sheet.</p>	<p>A3.1 For haemorrhagic stroke interventions: 2,900</p> <p>For thrombectomy: 450 completed during 2015/2016 to date (but some unfunded treatment as out of research.) With 120 paid for by the NHS and approx. 200 paid for in 16/17,</p>

	<p>A3.2 What will be the new activity should the new / revised service specification be implemented in the target population? Please provide details in accompanying excel sheet.</p> <p>A3.3 What will be the comparative activity for the 'Next Best Alternative' or 'Do Nothing' comparator if service specification is not adopted? Please details in accompanying excel sheet.</p>	<p>A3.2 For haemorrhagic stroke the specification will not increase numbers but improve more timely access for intervention. For thrombectomy a phased increase in activity is detailed as part of the policy implementation.</p> <p>A3.3 There is no other treatment option for this group of patients other than rehabilitation for disability and good nursing care.</p>
<p>A4 Existing Patient Pathway</p>	<p>A4.1 If there is a relevant currently routinely commissioned treatment, what is the current patient pathway? Describe or include a figure to outline associated activity.</p> <p>A4.2. What are the current treatment access criteria?</p>	<p>A4.1 This specification supports the pathway set out in the thrombectomy policy and neurosurgery specification, there are no proposed changes to these pathways</p> <p>A4.2 See comment above</p>

	A4.3 What are the current treatment stopping points?	A4.3 N/A
A5 Comparator (next best alternative treatment) Patient Pathway	<p>A5.1 If there is a 'next best' alternative routinely commissioned treatment what is the current patient pathway? Describe or include a figure to outline associated activity.</p> <p>A5.2 Where there are different stopping points on the pathway please indicate how many patients out of the number starting the pathway would be expected to finish at each point (e.g. expected number dropping out due to side effects of drug, or number who don't continue to treatment after having test to determine likely success). If possible please indicate likely outcome for patient at each stopping point.</p>	<p>A5.1 N/A</p> <p>A5.2 If eligibility criteria are fulfilled then it would be a rare occasion that a patient would not proceed to treatment.</p>
A6 New Patient Pathway	A6.1 Describe or include a figure to outline associated activity with	A6.1

	<p>the patient pathway for the proposed new service specification.</p> <p>A6.2 Where there are different stopping points on the pathway please indicate how many patients out of the number starting the pathway would be expected to finish at each point (e.g. expected number dropping out due to side effects of drug, or number who don't continue to treatment after having test to determine likely success). If possible please indicate likely outcome for patient at each stopping point.</p>	<p>Figures as in section A1 and specifically in section A1.2 above</p> <p>A6.2 N/A</p>
<p>A7 Treatment Setting</p>	<p>A7.1 How is this treatment delivered to the patient?</p> <ul style="list-style-type: none"> <li>○ Acute Trust: Inpatient/Daycase/Outpatient</li> <li>○ Mental Health Provider: Inpatient/Outpatient</li> <li>○ Community setting</li> <li>○ Homecare delivery</li> </ul>	<p>A7.1 Acute Trust: Inpatient Neuroscience centre.</p>



	<p>A7.2 Is there likely to be a change in delivery setting or capacity requirements, if so what? <i>e.g. service capacity</i></p>	<p>A7.2 Yes development of services is part of the phased commissioning plan over 6 years while services implement a 24/7 service</p>
A8 Coding	<p>A8.1 In which datasets (e.g. SUS/central data collections etc.) will activity related to the new patient pathway be recorded?</p> <p>A8.2 How will this activity related to the new patient pathway be identified?(e.g. ICD10 codes/procedure codes)</p>	<p>A8.1 SUS, HRG and OPCS and outcomes within SSNAP</p> <p>A8.2 Pathway established within policy and current routine treatments.</p>
A9 Monitoring	<p>A9.1 Do any new or revised requirements need to be included in the NHS Standard Contract Information Schedule?</p> <p>A9.2 If this treatment is a drug, what pharmacy monitoring is required?</p>	<p>A9.1 No</p> <p>A9.2 N/A</p>

<p>A9.3 What analytical information /monitoring/ reporting is required?</p>	<p>A9.3 N/A</p>
<p>A9.4 What contract monitoring is required by supplier managers? What changes need to be in place?</p>	<p>A9.4 Reporting of quality indicators within specification. This can be taken from SSNAP</p>
<p>A9.5 Is there inked information required to complete quality dashboards and if so is it being incorporated into routine performance monitoring?</p>	<p>A9.5 No</p>
<p>A9.6 Are there any directly applicable NICE quality standards that need to be monitored in association with the new service specification?</p>	<p>A9.6 N/A</p>
<p>A9.7 Do you anticipate using Blueteq or other equivalent system to guide access to treatment? If so, please outline.</p>	<p>A9.7 No</p>

See also linked question in M1 below

### Section B - Service Impact

Theme	Questions	Comments (Include source of information and details of assumptions made and any issues with the data)
B1 Service Organisation	<p>B1.1 How is this service currently organised? (i.e. tertiary centres, networked provision)</p> <p>B1.2 How will the proposed service specification change the way the commissioned service is organised?</p>	<p>B1.1 Stroke care is organised within provider networks, these interventions require referral to a Neuroscience centre.</p> <p>B1.2 Potential for CCGs to unbundle the stroke pathway payment when reduction in length of stay is understood as part of policy implementation.</p>
B2 Geography & Access	<p>B2.1 Where do current referrals come from?</p>	<p>B2.1 Emergency departments and stroke services. Hospitals with hyper acute stroke units (HASU)</p>

	<p>B2.2 Will the new service specification change / restrict / expand the sources of referral?</p> <p>B2.3 Is the new service specification likely to improve equity of access?</p> <p>B2.4 Is the new service specification likely to improve equality of access / outcomes?</p>	<p>B2.2 As above There may be a few patients referred from specialists units such as cardiothoracic units, these numbers will be small.</p> <p>B2.3 Yes by increasing the availability of the provision of the service.</p> <p>B2.4 As above</p>
<p>B3 Implementation</p>	<p>B3.1 Is there a lead in time required prior to implementation and if so when could implementation be achieved if the service specification is agreed?</p> <p>B3.2 Is there a change in provider physical infrastructure required?</p>	<p>B3.1 Phased implementation proposed within commissioning implementation plan. This will be overseen by a commissioning oversight group.</p> <p>B3.2 There are 24 adult Neuroscience Centres in England. Some may already be in a position to offer 24/7 services but it is envisaged that most will initially provide a daytime or limited hours service.</p>

B3.3 Is there a change in provider staffing required?

B3.3

Increase in number of interventional neuroradiologists or equivalent role (with accompanying increase in associated necessary support staff) to deliver thrombectomy 24/7 and acute aneurysm coiling 7/7.

B3.4 Are there new clinical dependency / adjacency requirements that would need to be in place?

B3.4

Full immediate access to imaging, critical care and anaesthetics as detailed in the service specification. Approximately  $\frac{3}{4}$  of patients will require an additional ambulance transfer therefore access to critical (critical response times) ambulance transfer.

B3.5 Are there changes in the support services that need to be in place?

B3.5

Critical transfers contracts with ambulance trusts.  
CT Angiography needs to be available for stroke patients in any hospital admitting/managing acute stroke. Acute stroke care unit and HASU and access to patient transport for repatriation.

B3.6 Is there a change in provider

B3.6

	<p>/ inter-provider governance required? (e.g. ODN arrangements / prime contractor)</p> <p>B3.7 Is there likely to be either an increase or decrease in the number of commissioned providers?</p> <p>B3.8 How will the revised provision be secured by NHS England as the responsible commissioner? (e.g. publication and notification of new service specification, competitive selection process to secure revised provider configuration)</p>	<p>ODN framework already in place for Stroke services</p> <p>B3.7 It is envisaged that in some regions not all neuroscience centres will need to provide 24/7 service but may become part of a network to cover out of hours.</p> <p>B3.8 Publication and compliance to service specification for neuroscience centres some may provide a networked approach to enable 24/7 access.</p>
<p>B4 Collaborative Commissioning</p>	<p>B4.1 Is this service currently subject to or planned for collaborative commissioning arrangements? (e.g. future CCG lead, devolved commissioning arrangements)</p>	<p>B4.1 No</p>

**Section C - Finance Impact**

<b>Theme</b>	<b>Questions</b>	<b>Comments</b> (Include source of information and details of assumptions made and any issues with the data)
C1 Tariff	<p>C1.1 Is this treatment paid under a national prices*, and if so which?</p> <p>C1.2 Is this treatment excluded from national prices?</p> <p>C1.3 Is this covered under a local price arrangements (if so state range), and if so are you confident that the costs are not also attributable to other clinical services?</p> <p>C1.4 If a new price has been proposed how has this been derived / tested? How will we ensure that associated activity is not additionally / double charged through existing routes?</p>	<p>C1.1 Yes The revenue cost per patient is based on HRG YA12Z.</p> <p>C1.2 No</p> <p>C1.3 No</p> <p>C1.4 N/A Current within tariff and identified by HRG</p>

	<p>C1.5 is VAT payable (Y/N) and if so has it been included in the costings?</p> <p>C1.6 Do you envisage a prior approval / funding authorisation being required to support implementation of the new service specification?</p>	<p>C1.5 N/A</p> <p>C1.6 No</p>
C2 Average Cost per Patient	<p>C2.1 What is the revenue cost per patient in year 1?</p> <p>C2.2 What is the revenue cost per patient in future years (including follow up)?</p>	<p>C2.1 Year 1 is £13,885 per patient</p> <p>C2.2 As year 1</p>
C3 Overall Cost Impact of this service specification to NHS England	C3.1 Indicate whether this is cost saving, neutral, or cost pressure to NHS England.	<p>C3.1 Cost neutral as this supports the implementation of the thrombectomy pathway already costed within the policy proposition. Other neuro interventions detailed are already funded</p>



	<p>C3.2 Where this has not been identified set out the reasons why this cannot be measured.</p>	<p>C3.2 N/A</p>
<p>C4 Overall cost impact of this service specification to the NHS as a whole</p>	<p>C4.1 Indicate whether this is cost saving, neutral, or cost pressure for other parts of the NHS (e.g. providers, CCGs).</p> <p>C4.2 Indicate whether this is cost saving, neutral, or cost pressure to the NHS as a whole.</p> <p>C4.3 Where this has not been identified, set out the reasons why this cannot be measured.</p> <p>C4.4 Are there likely to be any costs or savings for non NHS commissioners / public sector funders?</p>	<p>C4.1 Yes: Savings generated would also arise outside the healthcare system through a reduction in rates of disability and dependence in stroke survivors.</p> <p>C4.2 N/A within policy.</p> <p>C4.3 Cost savings and pressures are already accounted for in the current service provision and thrombectomy policy.</p> <p>C4.4 As above</p>

C5 Funding	C5.1 Where a cost pressure is indicated, state known source of funds for investment, where identified. <i>e.g. decommissioning less clinically or cost-effective services</i>	C5.1 N/A
C6 Financial Risks Associated with Implementing this service specification	<p>C6.1 What are the material financial risks to implementing this service specification?</p> <p>C6.2 Can these be mitigated, if so how?</p> <p>C6.3 What scenarios (differential assumptions) have been explicitly tested to generate best case, worst case and most likely total cost scenarios?</p>	<p>C6.1 Financial risk being covered in policy for thrombectomy</p> <p>C6.2 Oversight group and activity monitoring in first year to establish net savings to both NHS England and CCGs</p> <p>C6.3</p>
C7 Value for Money	C7.1 What evidence is available that the treatment is cost effective? <i>e.g. NICE appraisal, clinical trials or peer reviewed</i>	NICE- Mechanical clot retrieval for treating acute ischaemic stroke - Interventional procedures guidance [IPG548] Published date: February 2016

	<p><i>literature</i></p> <p>C7.2 What issues or risks are associated with this assessment? <i>e.g. quality or availability of evidence.</i></p>	<p>Sentinel Stroke National Audit Programme Cost and Cost-effectiveness analysis 2016</p> <p>C7.2</p>
<p>C8 Cost Profile</p>	<p>C8.1 Are there non-recurrent capital or revenue costs associated with this service specification? <i>e.g. Transitional costs, periodical costs</i></p> <p>C8.2 If so, confirm the source of funds to meet these costs.</p>	<p>C8.1 PACS workstations at home for all neurointerventionists on the coiling/thrombectomy rota &amp; with full connectivity to all hospital PACS systems referring into their service (circa £12,000 per interventionist)</p> <p>Currently mapping any other associated costs.</p> <p>C8.2 N/A</p>