Topic proposal

I understand that this proposal will be retained by the SIGN Programme Lead and be made available on the SIGN website for time period that the proposal is being considered. **Only proposals with a completed Declaration of Interests for the principal proposer will be considered**	
1.	**What is the problem/need for a guideline/clinical scenario?**
	Newly available clinical trial evidence has shown significant benefit from endovascular treatment using mechanical thrombectomy in patients with acute ischaemic stroke caused by occlusion of a large intracranial artery. This treatment has undergone significant technical advances since the existing SIGN guideline for stroke was published (SIGN 108, December 2008). Using current techniques and patient selection, the available data would now support mechanical thrombectomy being incorporated into the standard of care for stroke in Scotland. This would be a key recommendation for a revised stroke guideline.
2.	**Burden of the condition**
	Mortality Stroke mortality in Scotland is 48 per 100,000 population (ISD Scotland Stroke Statistics 2014-2015)
	Incidence The incidence of cerebrovascular disease in Scotland is 261 per 100,000 population (ISD Scotland Stroke Statistics 2014-2015)
	Prevalence The prevalence of stroke and transient ischaemic attack in Scotland is 2.2% using quality and outcomes framework (QOF) data recorded by GP practices (ISD Scotland Stroke Statistics 2014-2015)
3.	**Variations**
	In practice in Scotland This procedure is performed by trained interventional neuroradiologists. NHS Scotland has established endovascular neurointerventional services in Edinburgh (Department of Clinical Neurosciences, Western General Hospital) and Glasgow (Institute of Neurological Sciences, Queen Elizabeth University Hospital). These units are currently configured to cover endovascular neurosurgery treatment for haemorrhagic stroke across the whole country, but are not resourced to offer comprehensive access to thrombectomy for ischaemic stroke. Investment to optimise patient transfer to these centres from other hospitals in Scotland will be essential as thrombectomy is only effective if it is performed early (typically within 6 hours of symptom onset).
	In health outcomes in Scotland Meta-analysis of the recent trial data shows that thrombectomy added to best medical therapy more than doubles the chance of recovery without significant disability after acute stroke due to a large vessel occlusion (Odds Ratio 2.35 for mRS 0-2. Goyal et al. Lancet. February 18, 2016 http://dx.doi.org/10.1016/S0140-6736(16)00163-X). Currently this treatment has only very limited availability so most patients do not have the option of this therapy in Scotland.
4.	**Areas of uncertainty to be covered**
	Key question 1 Treatment of ischaemic stroke using mechanical thrombectomy: Current evidence; Indications; Patient selection; Procedure.
	Key question 2
	Key question 3

5.	**Areas that will not be covered**
	Other areas of stroke care covered in SIGN 108.
6.	**Aspects of the proposed clinical topic that are key areas of concern for patients, carers and/or the organisations that represent them**
	The balance of risk versus benefit from the procedure Access to receive the treatment early enough for it to be benficial
7.	**Population**
	Included The treatment is applicable to patients of any age who have had an acute ischaemic stroke due to a large artery occlusion in whom intravenous thrombolysis is either being used or is contraindicated. We estimate this would apply to about 500 patients per year in Scotland but could eventually be double this
	Not included Haemorrhagic stroke Minor stroke due to small vessel occlusion
8.	**Healthcare setting**
	Included Secondary/Tertiary Care.
	Not included
9.	**Potential**
	Potential to improve current practice Mechanical thrombectomy is an evidence based intervention which offers significant improvement in patient outcomes when compared with the current standard of care.
	Potential impact on important health outcomes (name measureable indicators) Reduced risk of neurological disability and dependence. Consequent cost saving benefits to NHS Scotland across medical and social care due to reduced hospital bed stay and disability.
	Potential impact on resources (name measureable indicators) Significant investment will be required to set up a service which can deliver thrombectomy 24/7 across the population of Scotland. However, a quality and productivity case study from The Royal Stoke University Hospital published by NICE (www.nice.org.uk/localpracticecollection) showed annual savings of £0.8 million from a reduction in the length of stay in hospital and £1.6 million savings from a reduction in social care costs from that institution.
10.	**What evidence based guidance is currently available?**
	Out-of-date (list) SIGN 108, December 2008
	Current (list) Mechanical clot retrieval for treating acute ischaemic stroke. NICE interventional procedure guidance [IPG548]. February 2016. The HTA group in Scotland is due to publish and evidence note shortly – this will be partly based on the EU HTA groups report prepared by the German and Irish groups.

11.	**Relevance to current Scottish Government policies**
	Stroke is a priority for the NHS in Scotland. The Scottish Government 's stroke improvement plan aims to improve the outcomes of stroke patients. Targeted thrombectomy for acute ischaemic stroke is a highly effective way of improving the outcome for a small but important subgroup of stroke patients who would otherwise have a poor outcome.
12.	**Who is this guidance for?**
	Stroke physicians, ED staff involved in stroke thrombolysis and interventional neuroradiologists
13.	**Implementation**
	Links with existing audit programmes – Thrombectomy would be audited through the Scottish stroke care Audit which currently audits the care of all hospital admitted stroke patients in Scotland and already reports on intravenous thrombolysis
	Existing educational initiatives – There have been educational sessions on thrombectomy at UKSF (Dec 2015) and the SSCA annual meeting (Aug 2015), and in Dundee (September 2015)
	Strategies for monitoring implementation – through SSCA and the Stroke improvement Plan coordinated through NACS by Katrina Brennan
14.	**Primary contact for topic proposal**
	Dr Jonny Downer, Consultant Neurointerventionist, Department of Clinical Neurosciences, Edinburgh.
15.	**Group(s) or institution(s) supporting the proposal**
	National Advisory Committee for stroke

Declaration of Interests

Please complete all sections and if you have nothing to declare please put 'N/A

Having read the SIGN Policy on Declaration of Competing Interests I declare the following competing interests for the previous year, and the following year. I understand that this declaration will be retained by the SIGN Programme Lead and be made available on the SIGN website for time period that the proposal is being considered.

Signature:	
Name:	Jonathan Downer
Relationship to SIGN:	Topic proposal primary contact
Date:	21/4/2016
Date received at SIGN:	22/04/2016

Personal Interests

Remuneration from employment

	Name of Employer and Post held	Nature of Business	Self or partner/ relative	Specific?
Details of employment held which may be significant to, or relevant to, or bear upon the work of SIGN	NHS Lothian Consultant Interventional Neuroradiologist	Neurointevention and Diagnostic Neuroradiology	Self	

Remuneration from self employment

	Name of Business	Nature of Business	Self or partner/ relative	Specific?
Details of self employment held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as holder of paid office

	Nature of Office held	Organisation	Self or partner/ relative	Specific?
Details of office held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as a director of an undertaking

	Name of Undertaking	Nature of Business	Self or partner/ relative	Specific?
Details of directorship held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as a partner in a firm

	Name of Partnership	Nature of Business	Self or partner/ relative	Specific?
Details of Partnership held which may be significant to, or relevant to, or bear upon the work of SIGN	Edinburgh Specialist Imaging LLP	Neuroradiology Private Practice Partnership	Self	

Shares and securities

	Description of organisation	Description of nature of holding (value need not be disclosed)	Self or partner/ relative	Specific?
Details of interests in shares and securities in commercial healthcare companies, organisations and undertakings				

Remuneration from consultancy or other fee paid work commissioned by, or gifts from, commercial healthcare companies, organisations and undertakings

	Nature of work	For whom undertaken and frequency	Self or partner/ relative	Specific?
Details of consultancy or other fee paid work which may be significant of to, or relevant to, or bear upon the work of SIGN				

Details of gifts which may be significant to, or relevant to, or bear upon the work of SIGN				

Non-financial interests

	Description of interest	Self or partner/ relative	Specific?
Details of non-financial interests which may be significant to, or relevant to, or bear upon the work of SIGN			

Non-personal interests

	Name of company, organisation or undertaking	Nature of interest
Details of non-personal support from commercial healthcare companies, organisations or undertakings	Various	Funding to attend educational meetings

Signature _____ *Date:* *21/04/2016*

Thank you for completing this form.

Please return to
Roberta James
SIGN Programme Lead
SIGN Executive, Healthcare Improvement Scotland,
Gyle Square | 1 South Gyle Crescent | Edinburgh | EH12 9EB

t: **0131 623 4735**
e:**roberta.james@nhs.net**

Data Protection

Your details will be stored on a database for the purposes of managing this guideline topic proposal. We may retain your details so that we can contact you about future Healthcare Improvement Scotland activities. We will not pass these details on to any third parties. Please indicate if you do not want your details to be stored after the proposal is published.