Topic proposal

SIGN

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?**
	Pulmonary embolism and deep vein thrombosis (venous thromboembolism, VTE). Avoidable or premature deaths are occurring because of poor understanding and implementation of guidance.
2.	**Burden of the condition**
	Mortality: accounts for 10% of hospital deaths.
	Incidence: DVT incidence 1-2/1000 population/year. Pulmonary thromboembolism (PE) 1% of all hospital admissions. Among the commonest causes of maternal mortality.
	Prevalence: approximately 10,000 people on treatment for VTE each year in Scotland. Greater Glasgow and Clyde (population 1.2M) treats 2,000-2,500/year. 20% of these patients have a cancer diagnosis and approximately 66% of this group die within 6 months.
3.	**Variations**
	In practice in Scotland. Wide – diagnosis is frequently missed. Access to diagnostic facilities – wide variation. Understanding of risks of PE, and implementation of appropriate therapy is frequently poor. Follow up and secondary prevention - wide variation and no clear recommendations or implementation. Prophylaxis of DVT/PE for surgical, neurosurgical and particularly orthopaedic procedures – very wide variation, within and between hospitals and even individual surgeons in the same unit. Deaths are occurring that are avoidable. There is no consistency for secondary prevention of subsequent DVT for people who have had a prior DVT.
	In health outcomes in Scotland ISD data for 2016 lists 6,700 death from ischaemic heart disease, and 180 deaths from VTE. This reflects a lack of understanding of the contribution of VTE to in-hospital and cancer deaths, with a consequent lack of treatment. Massive and submassive PE are not well understood, investigated or treated. Opportunities to save patients' lives are being lost.
4.	**Areas of uncertainty to be covered**
	Key question 1 Management (pharmacological and non-pharmacological management of acute PE Scotland needs to improve management of critically ill patients with massive/submassive PE. A new SIGN guideline will explain this crucial area of acute care in simple, easy to follow steps. This key area is buried in the existing SIGN guideline 122. I am certain lives will be saved. The NICE VTE guidance does not address these patients.

	Key question 2 Secondary prevention of DVT /PTE This is an area of poor understanding and little data. This is barely covered in SIGN 122 and is a crucial and frequently encountered clinical problem. Right now, GPs, practice nurses and hospital staff give no clear or consistent directive. The updated SIGN guideline will give practical advice and recommendation where little currently exists. This has major public value, interest and importance. DVT is common and patients will often need to travel at future points in their lives, after recovering from DVT/PTE.
5.	**Areas that will not be covered**
	Primary prevention of VTE Long term management of thromboembolic pulmonary hypertension Management of VTE in pregnancy. Treatment of incidental PTE discovered during investigations for other conditions.
6.	**Aspects of the proposed clinical topic that are key areas of concern for patients, carers and/or the organisations that represent them**
	1.The importance of VTE. 2. Correct and rapid diagnosis and treatment, particularly for critical cases. 3. Prevention of further VTE later in life
7.	**Population**
	Included Whole population (VTE rare in children)
	Not included Pregnant women
8.	**Healthcare setting**
	Included: Hospital practice – acute medical; surgical; orthopaedic; neurosurgical; cancer services. General practice.
	Not included None
9.	**Potential**
	Potential to improve current practice Improve mortality from acute PE; standardise treatment of surgical prophylaxis which is highly variable and often poor; standardise best treatment for anticoagulation of patients with acute VTE. Define treatment if required for incidental PE, and for special groups. Define treatment for secondary prevention of VTE in patients with a prior history.
	Potential impact on important health outcomes (name measureable indicators) Reduced deaths from VTE (ISD code I26), affecting also cancer deaths (ISD codes C00-D48). Shortened length of stay (in hospital data for orthopaedic surgery) Far fewer cases of traveller's DVT/PTE (hospital morbidity data, collected locally).

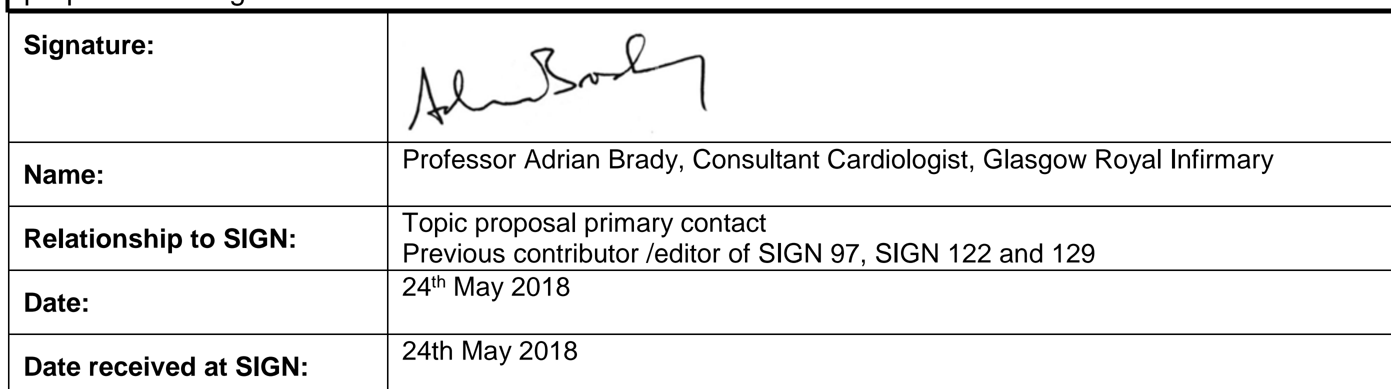
	Potential impact on resources (name measureable indicators) Increase in thrombolytic drug use, offset by shorter hospital stay. Likely cost saving. Increase in use of novel anticoagulants (Edoxaban, Apixaban, Rivaroxaban, Dabigatran) with increased drug cost but reduced burden on anticoagulant clinic, since no monitoring needed. Increased use of CT facilities out of hours. Increased cost of radiologist and radiographer time, offset by freeing up CT time during office hours, for other conditions. Likely modest extra cost. Cancer patients possibly surviving substantially longer, so increased cost.
10.	**What evidence based guidance is currently available?**
	None
	Out-of-date (list) 1. SIGN 122: Prevention and management of venous thromboembolism (2010)
	Current (list) 1. 2014 European Society of Cardiology: Diagnosis and Management of Acute Pulmonary Embolism. Updates the 2008 European Guideline, of which I was a principal author. 2. RCOG PTE 2007 3. NICE PTE 2009 4. NICE Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism (2019).
11.	**Relevance to current Scottish Government policies**
	Crucial to core values: A new SIGN guideline on VTE would address, just as an example, these three key issues: http://www.gov.scot/Topics/Health/Policy/Health-Social-Care-Integration/National-Health-WellbeingOutcomes Outcome 4. Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services Outcome 5. Health and social care services contribute to reducing health inequalities Outcome 7. People using health and social care services are safe from harm
12.	**Who is this guidance for?**
	All hospital staff looking after medical, surgical, cancer patients. General practitioners and their practice staff.
13.	**Implementation**
	Links with existing audit programmes ISD records of cause of death. In the West of Scotland there is a major and ongoing audit of practice in VTE. Measurable indices before and after new SIGN guidance would be performed. Nationally defined metrics would be written into the guideline to aid collection of national morbidity data. This does not exist at the moment.
	Existing educational initiatives Will be strongly advised for inclusion in medical, nursing and allied student curricula, and in CPD structures.
	Strategies for monitoring implementation Standardise and improve hospital coding of discharge; pharmacy monitoring of drug use; anticoagulant supervision; hospital length of stay on surgical and medical wards. Development of downloadable proforma for ward- or out-patient use for audit trail.

14.	**Primary contact for topic proposal**
	Professor Adrian Brady, Consultant Cardiologist, Glasgow Royal Infirmary. adrian.brady@glasgow.ac.uk 0141 211 4727 07768 690053 Past Author of European Society of Cardiology Pulmonary Embolism Guideline, the most cited/downloaded of all ESC guidelines.
15.	**Group(s) or institution(s) supporting the proposal**
	Greater Glasgow and Clyde VTE Group

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:	Professor Adrian Brady, Consultant Cardiologist, Glasgow Royal Infirmary
Relationship to SIGN:	Topic proposal primary contact Previous contributor /editor of SIGN 97, SIGN 122 and 129
Date:	24th May 2018
Date received at SIGN:	24th May 2018

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				

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	N/A			

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	N/A			

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	N/A			

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	N/A			

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	N/A			

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	I have in the past given lectures at meetings sponsored by all the pharmaceutical companies which manufacture the new anticoagulant drugs (NOACs). I would exclude myself from the writing, deliberation and decisions re choice	2-3/year	self	yes

	of NOACs for management of VTE.			
Details of gifts which may be significant to, or relevant to, or bear upon the work of SIGN	N/A			

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	N/A		

Non-personal interests

	Name of company, organisation or undertaking	**Nature of interest**
Details of non-personal support from commercial healthcare companies, organisations or undertakings	N/A	

*Signature*______________________________ *Date: 24.5.2018*

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.