

**Hospital Associated
Thrombosis:
the current situation
in England**

Roopen Arya

**National Thrombosis Week
2016**

The Journey

Adaptive strategy and consistent pressure ensures VTE prevention is made a clinical priority

NHS Prioritisation



Global Leaders

- Comprehensive, systematic approach to VTE prevention
- First national initiative of its kind anywhere in the world
- Key patient safety initiative:
 - ✓ Delivering high quality care
 - ✓ Reducing avoidable harm
 - ✓ Safer hospitals
- Leadership from NHS, parliamentarians, charities....
- Striving for excellence – VTE Exemplar Centres Network
- Delivered change, enabled by levers provided by NHS

System measures 1

National clinical guidelines for reducing risk in hospitalised patients

National risk assessment tool

Mandatory collection of VTE risk assessment data

VTE was the first national CQUIN target

System measures 2

NICE Quality Standard defines best VTE prevention practice

Recommendations for audit of thromboprophylaxis and root cause analysis of hospital-associated thrombosis

Strengthening of commissioning arrangements in NHS standard contract

Patient empowerment



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Venous thromboembolism (VTE): Paul Robinson's story



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This video tells the story of former England international goalkeeper Paul Robinson, who developed a pulmonary embolism five days after having a routine operation.

[Find out more about VTE](#)

Views: 1,721

Comments & Ratings:

0 comments | 9 ratings

Credits:

Media last reviewed: 18/11/2014

Next review due: 18/11/2016



[VTE: a guide for professionals](#)

This video offers guidance for health professionals on how to manage VTE



[VTE self-assessment](#)

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e-VTE

A web based education resource designed to help raise awareness and improve understanding of Venous Thromboembolism

Menu

- Programme home
- More information
- Meet the team
- Access the e-learning

More information

VTE prevention e-learning course

These resources have been developed in partnership with the NHS England National VTE Prevention Programme. The e-learning session for healthcare professionals in Secondary Care first published in 2010 and updated in 2013 is aimed at nurses, pharmacists and junior doctors to help them understand the concept of hospital-associated thrombosis and how to prevent it.

Three new sessions have been developed in 2014.

The first is aimed at Primary Care to increase the awareness of healthcare-related VTE and enhance the quality of patient care with respect to VTE prevention prior to hospital admission and after discharge. It is designed for all healthcare professionals including GPs, nurses, health visitors, midwives and community pharmacists.

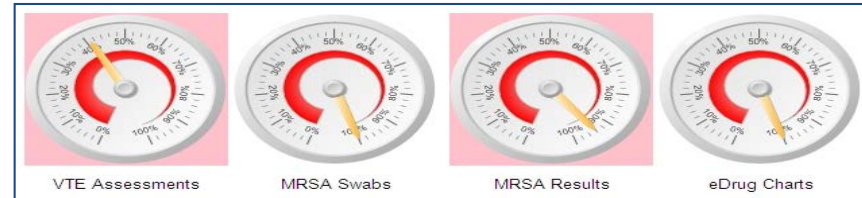
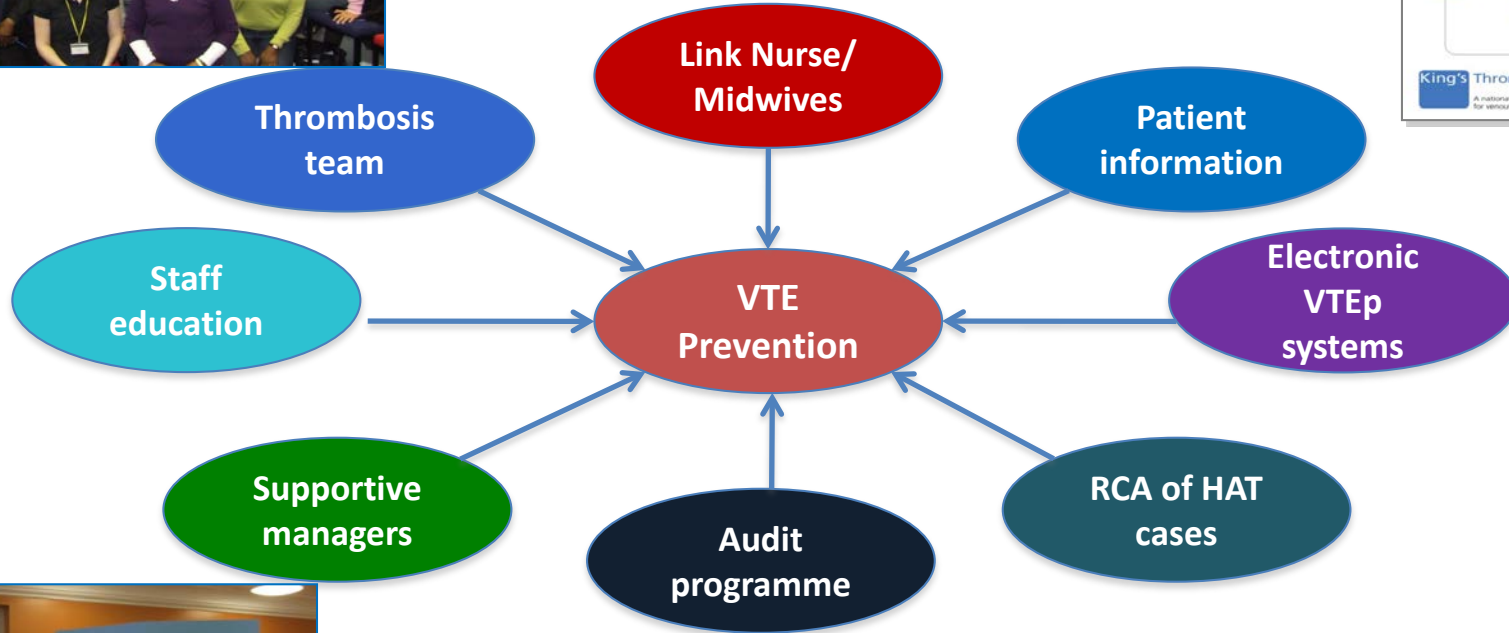
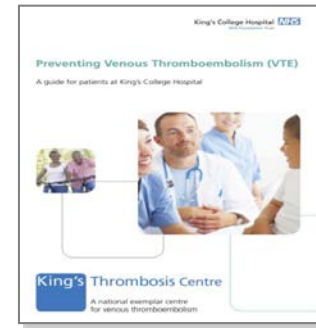
The second session has been developed for commissioners. This e-learning session provides a brief overview of venous thromboembolism as a condition and outlines the key role that commissioners have to play in ensuring that the delivery of acute care services across a range of medical & surgical specialities is underpinned by a high quality approach to VTE prevention in order to improve outcomes for patients.

The third e-learning session is aimed at undergraduates and is focused on the pathophysiology of VTE and pre-disposing risk factors, as well as outlining why prevention is so important in the context of the national programme.

e-LFH is a Health Education England Programme in partnership with the NHS and Professional Bodies

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Preventing VTE:



VTE prevention: what's changed?

- Patient Safety has moved to NHS Improvement
- Healthcare Safety Investigation Branch (HSIB) established
- VTE prevention should be 'business as usual'
- All system requirements are included in the NHS standard acute care contract
- Continue to refine understanding of VTE outcomes
- National VTE Exemplar Centres Network will continue to provide leadership and support the national programme

The VTE Exemplar Centres Network



NHS Champions for VTE Prevention

Guy's and St Thomas'



St George's



Champions from independent healthcare

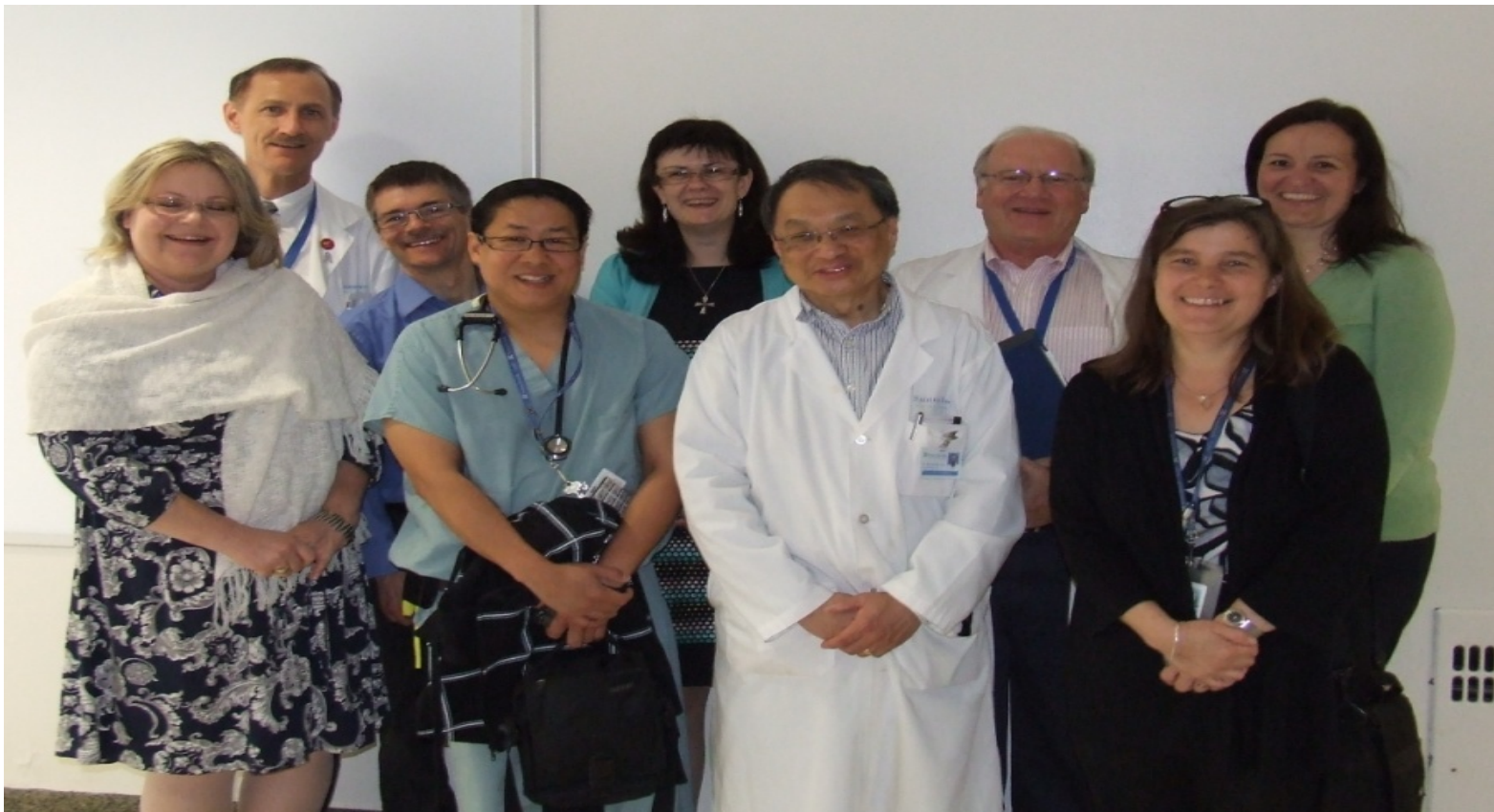


Spire Southampton

The Horder Centre



A global VTE network: Canada



A global VTE network: Australia



A global VTE network: Wales

Princess of Wales & Neath Port Talbot hospital



Understanding outcomes in VTE prevention

- Markers of process:
 - VTE risk assessment
 - Appropriate prophylaxis rates
- Cases identified via local HAT-RCA programmes
- Identifying cases of VTE and HAT at a national level

Understanding VTE outcomes

- Limitations of thromboprophylaxis
- Limitations of coding
- Limitations of death reporting
- Limitations of the outcome indicator as a marker for quality of VTE prevention process
 - Evaluation of surveillance bias and the validity of the VTE quality measure
Bilimoria et al, JAMA 2013; 310(14):1482-1489
 - Association between inpatient surveillance and VTE rates after hospital discharge
Holcomb et al, JAMA Surg 2015 (online April 1)
 - Thromboembolic complications and prophylaxis patterns in colorectal surgery
SCOAP-CERTAIN collaborative, *JAMA Surg 2015 (online June 10)*

Impact of national VTE prevention programme in England

Global burden of cardiovascular disease

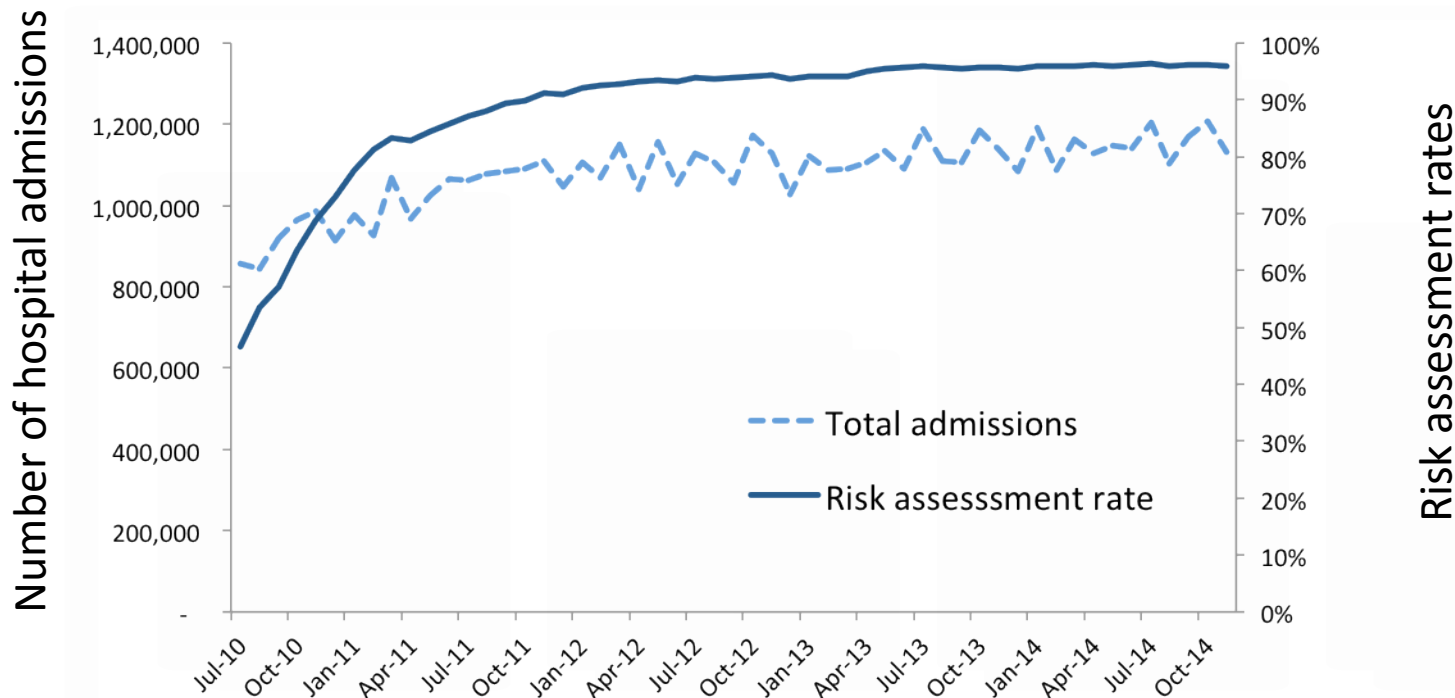
Impact of the national venous thromboembolism risk assessment tool in secondary care in England: retrospective population-based database study

David Catterick^{a,b} and Beverly J. Hunt^c

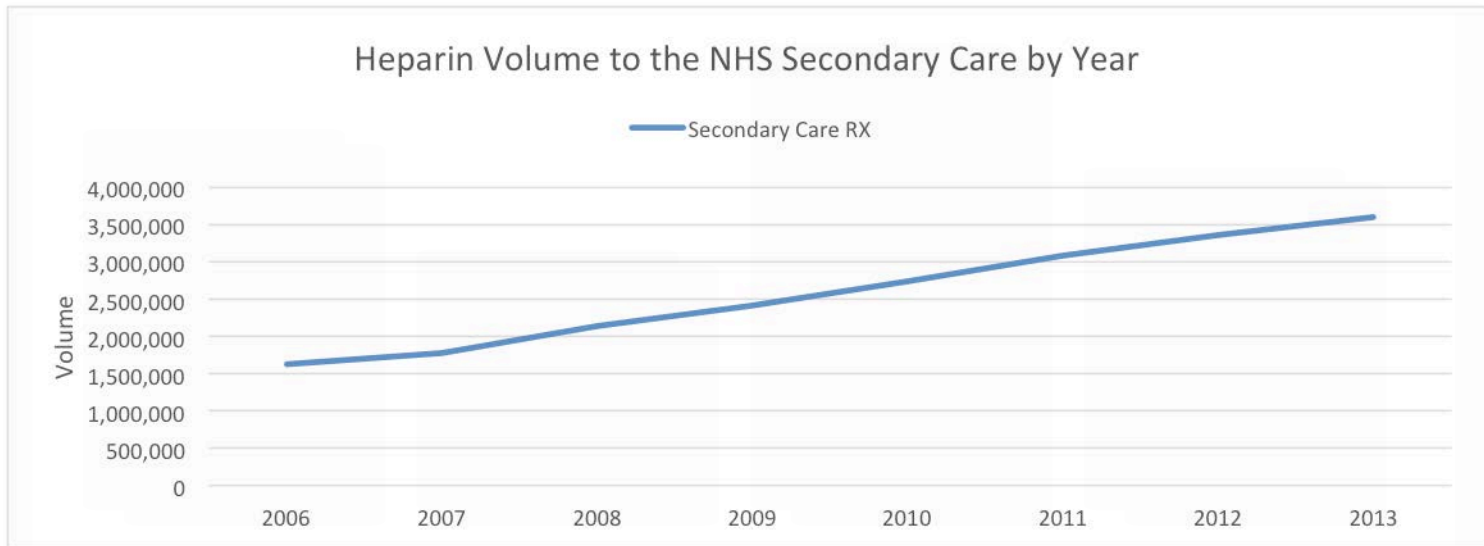
Domenico Pagano^{1,2}

1. Blood Coagul Fibrinolysis 2014; 25(6):571-62.
2. Heart 2013; 0:1-6.
3. Chest. 2013 ; 144(4):1276-81.

VTE risk assessment rates



Expenditure on prophylactic LMWH



Process measures: AUDIT

Reducing Risks

7 Did Patient receive any of the following - please select all that apply

Enoxaparin	<input checked="" type="checkbox"/>	Rivaroxaban	<input type="checkbox"/>
AES (Anti embolism Stockings / TED stockings)	<input checked="" type="checkbox"/>	UFH (un-fractionated Heparin)	<input type="checkbox"/>
IPC (intermittent pneumatic compression)	<input type="checkbox"/>	Other (please specify)	<input type="checkbox"/>
Already on warfarin	<input type="checkbox"/>	None prescribed	<input type="checkbox"/>

8 If Enoxaparin was prescribed what was the dose?

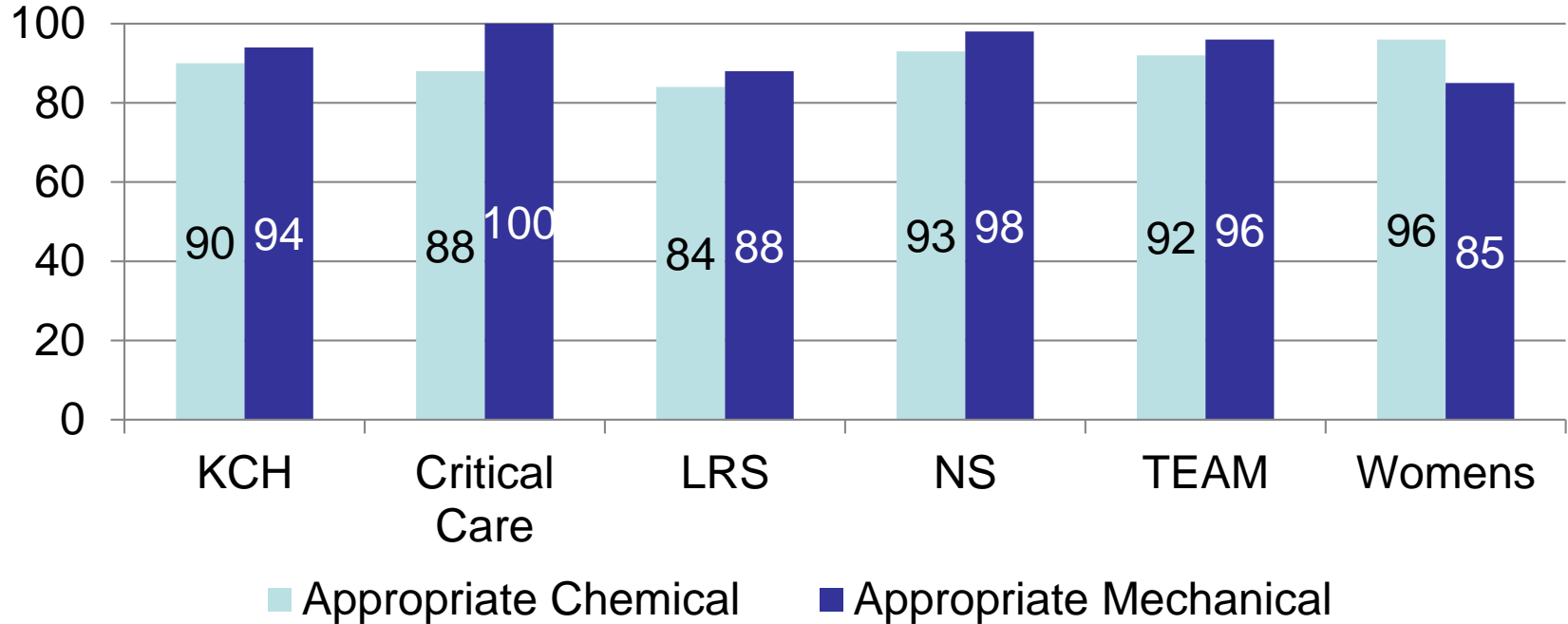
20mg od	40mg od	40mg bd	60mg bd	Other, please specify	Enoxaparin not prescribed
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9 Is the patient wearing AES?

Yes	No
<input checked="" type="radio"/>	<input type="radio"/>

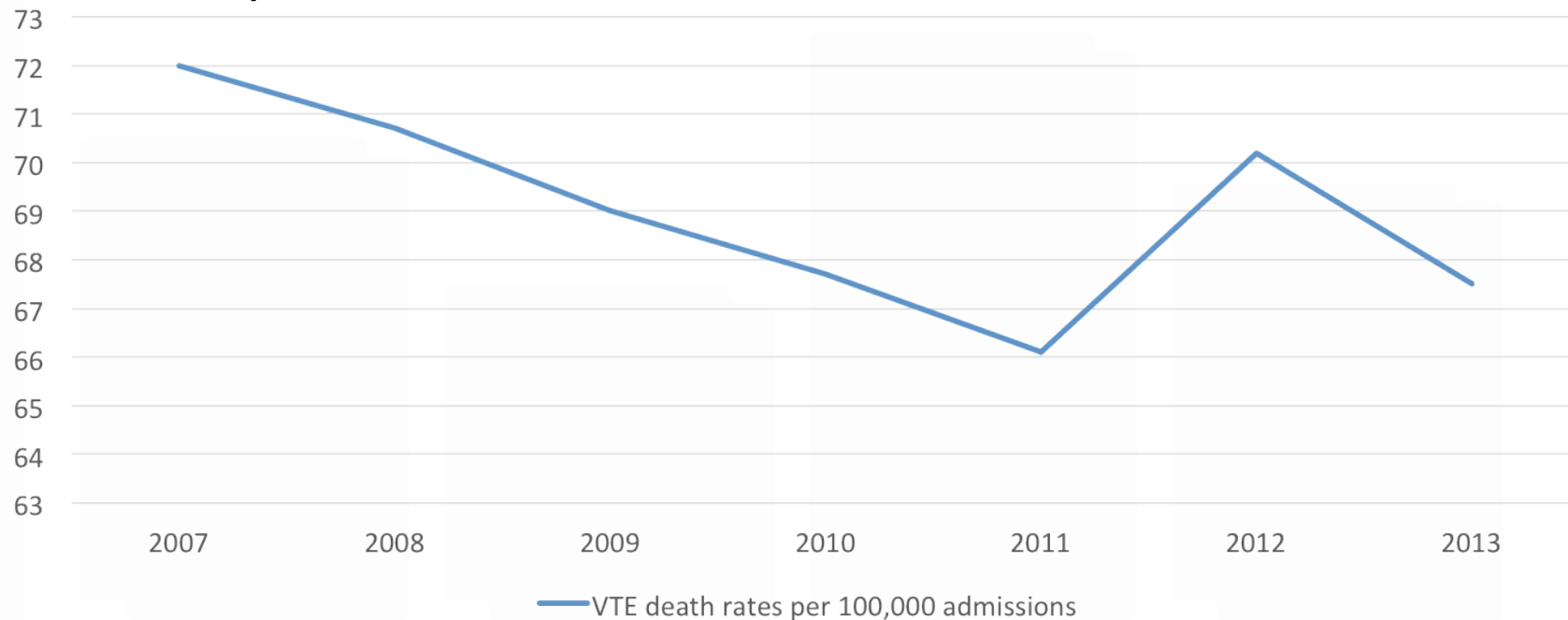
Audit findings: Standard 4

Was pharmacological or mechanical TP correct?

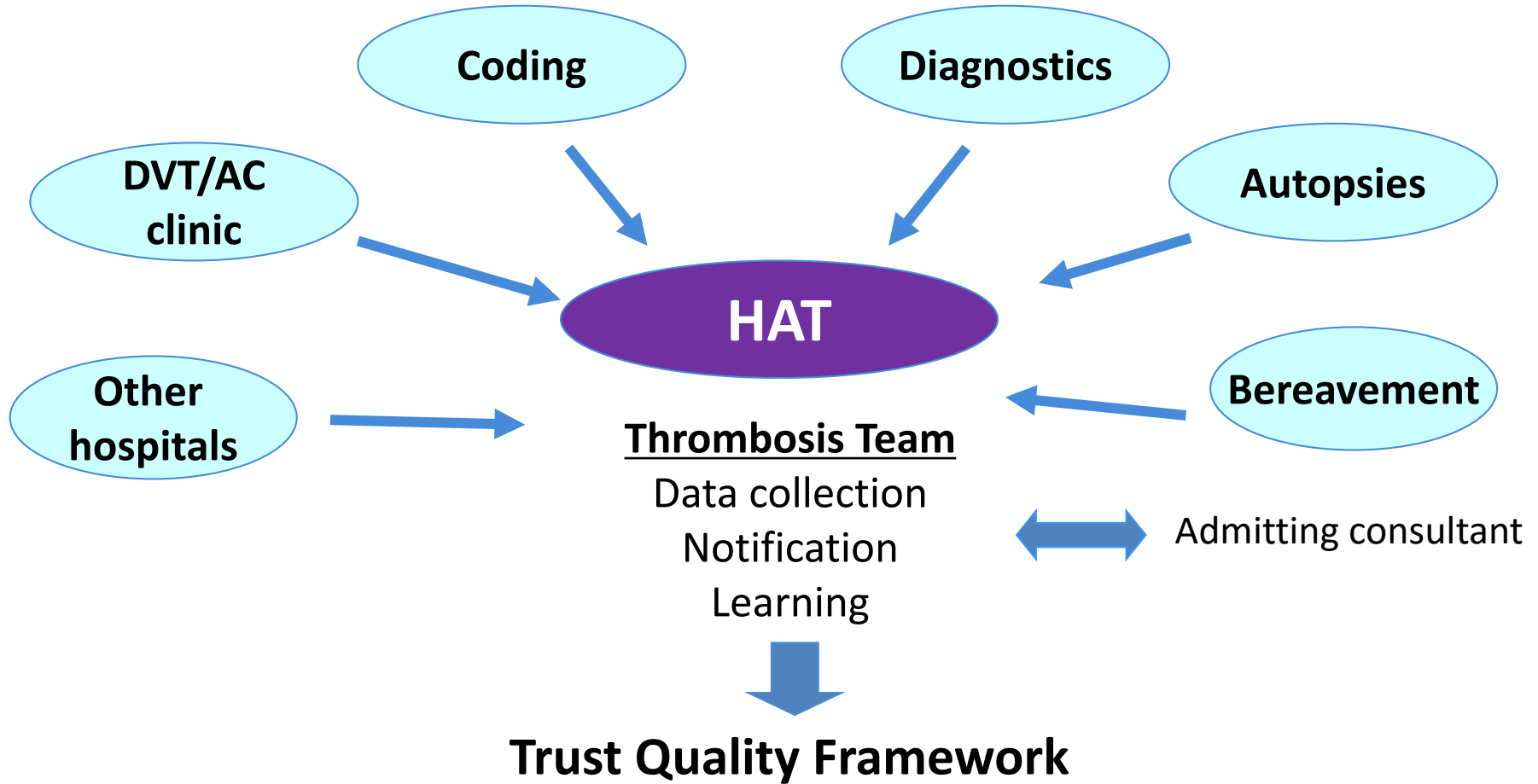


Deaths from VTE related events within 90 days post discharge from hospital (NHS Outcomes Framework Indicator 5.1)

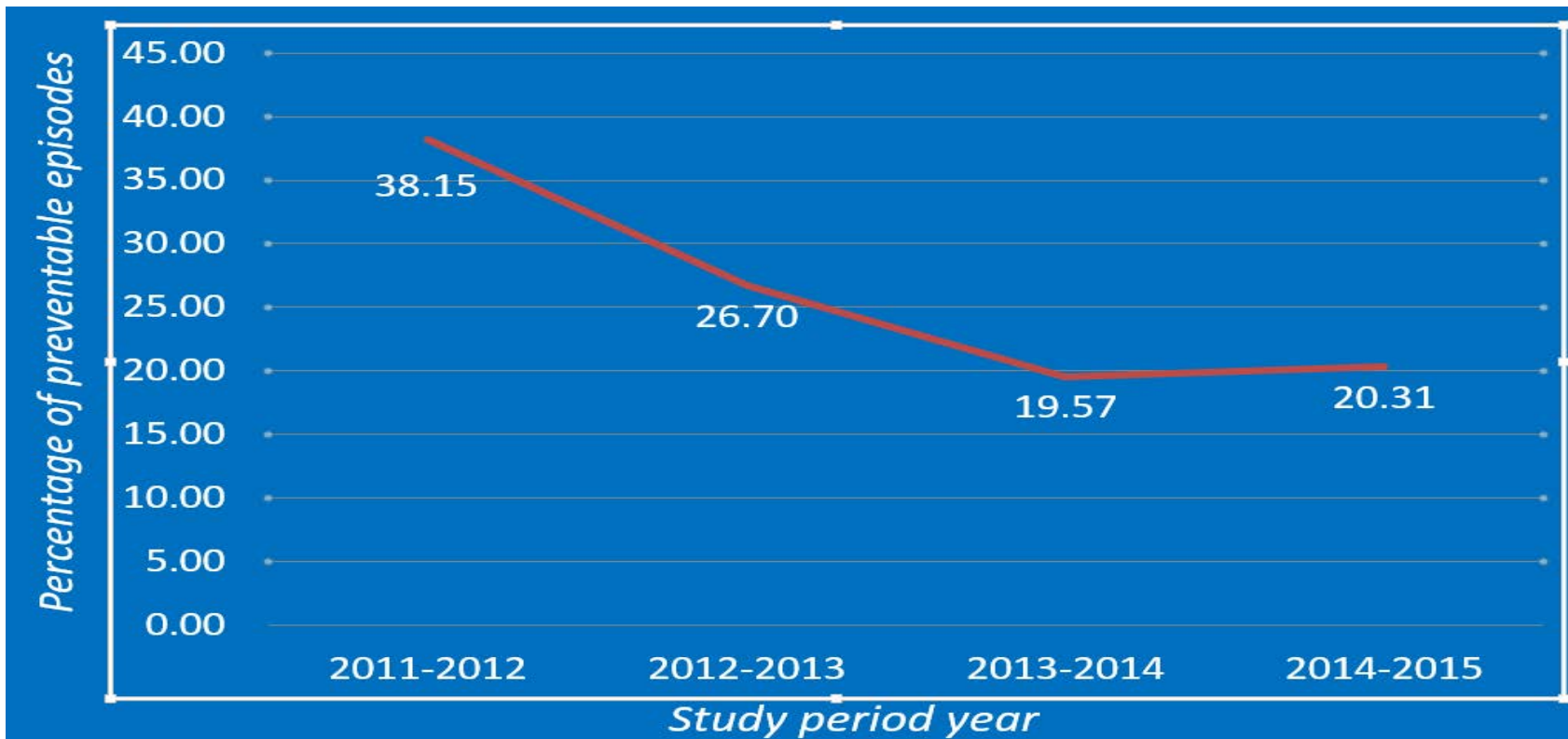
Rate per 100,000 adult admissions, 2007/08 to 2013/14.



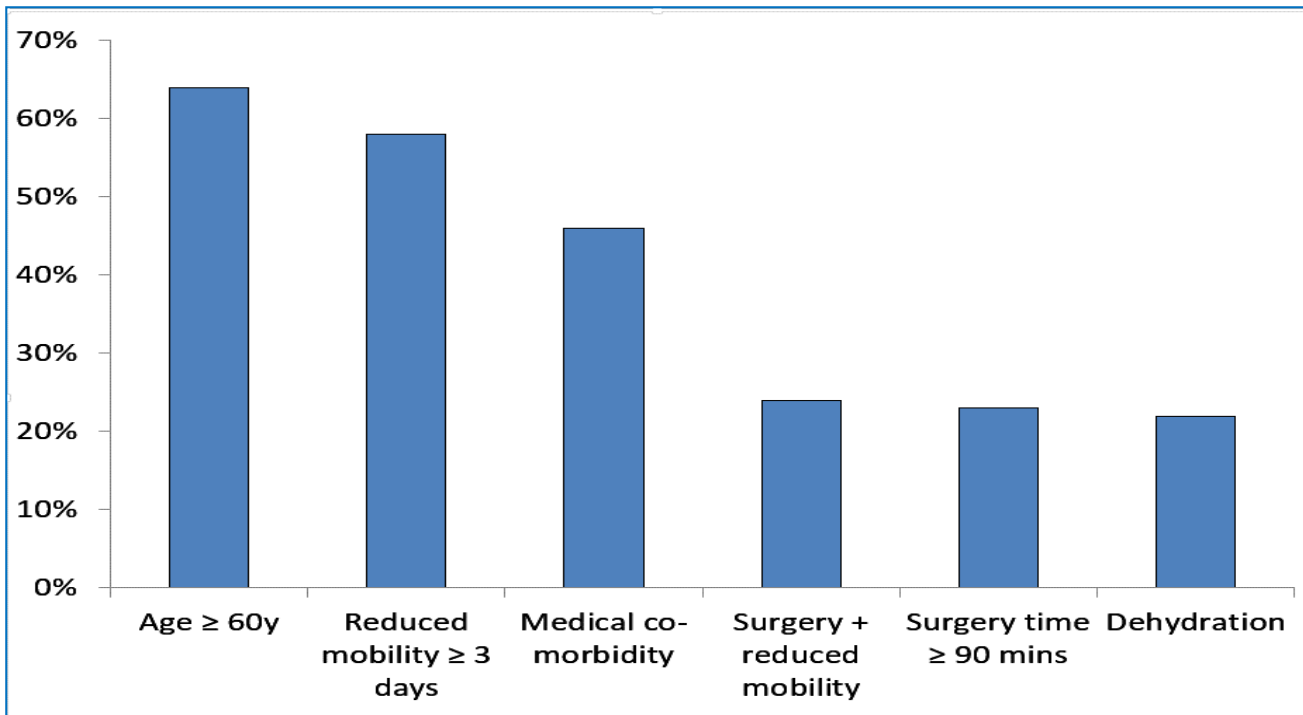
Root cause analysis of cases of HAT



Local HAT trends



HAT root cause analysis: thromboprophylaxis failure



Preventing HAT

- National VTE prevention programme has developed a comprehensive systems-based approach to VTE prevention
- There have been demonstrable improvements in process measures and VTE outcomes
- Devising a meaningful VTE outcomes indicator remains a priority

Where next?

- Sustaining best practice in VTE prevention is a continuing challenge
- Substantial burden of HAT remains
- Need for further research to help improve best practice

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VTE Exemplar Centres
Providing leadership in thrombosis care