



VTE...
Going beyond
Risk Assessment

Sign Up to Safety Webinar
20 April 2015

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What is VTE?

- Venous Thromboembolism is a collective term for deep vein thrombosis (DVT) & pulmonary embolism (PE)
- Incidence 1-2 per 1000 population
- Around 64,000 cases in England every year
- Mortality rate ~10%
- Risk of developing VTE increases with age
- Estimated that 50% of cases are associated with hospitalisation
- **As many as 2/3 of cases of Hospital-Associated Thrombosis (HAT) are preventable**

The VTE Journey

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

NHS Prioritisation

Focal Point for Change

HSC Inquiry

2005

www.england.nhs.uk

APPTG

2006

CMO announces national approach

2007

NICE CG46



Risk Assessment template

2008

Exemplar Centre website



Leadership Summit



2009

RA data collection

2010

NICE CG92

National Institute for Health and Clinical Excellence

NICE QS3



CQUIN



CQUIN goal reached

2011

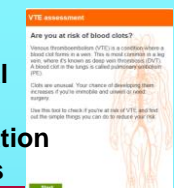
VTE in NHS standard contract

Commissioning Toolkit



Risk Assessment figs now at 96%

NHS Choices Self-assessment tool



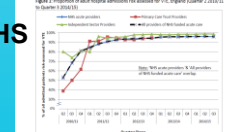
Information Standard



National Patient Information Leaflets

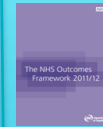


New e-learning modules

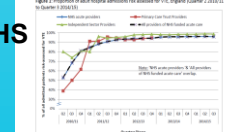


NHS Litigation Authority

dr foster health

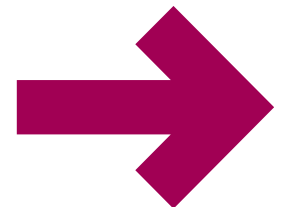


Commissioning Toolkit



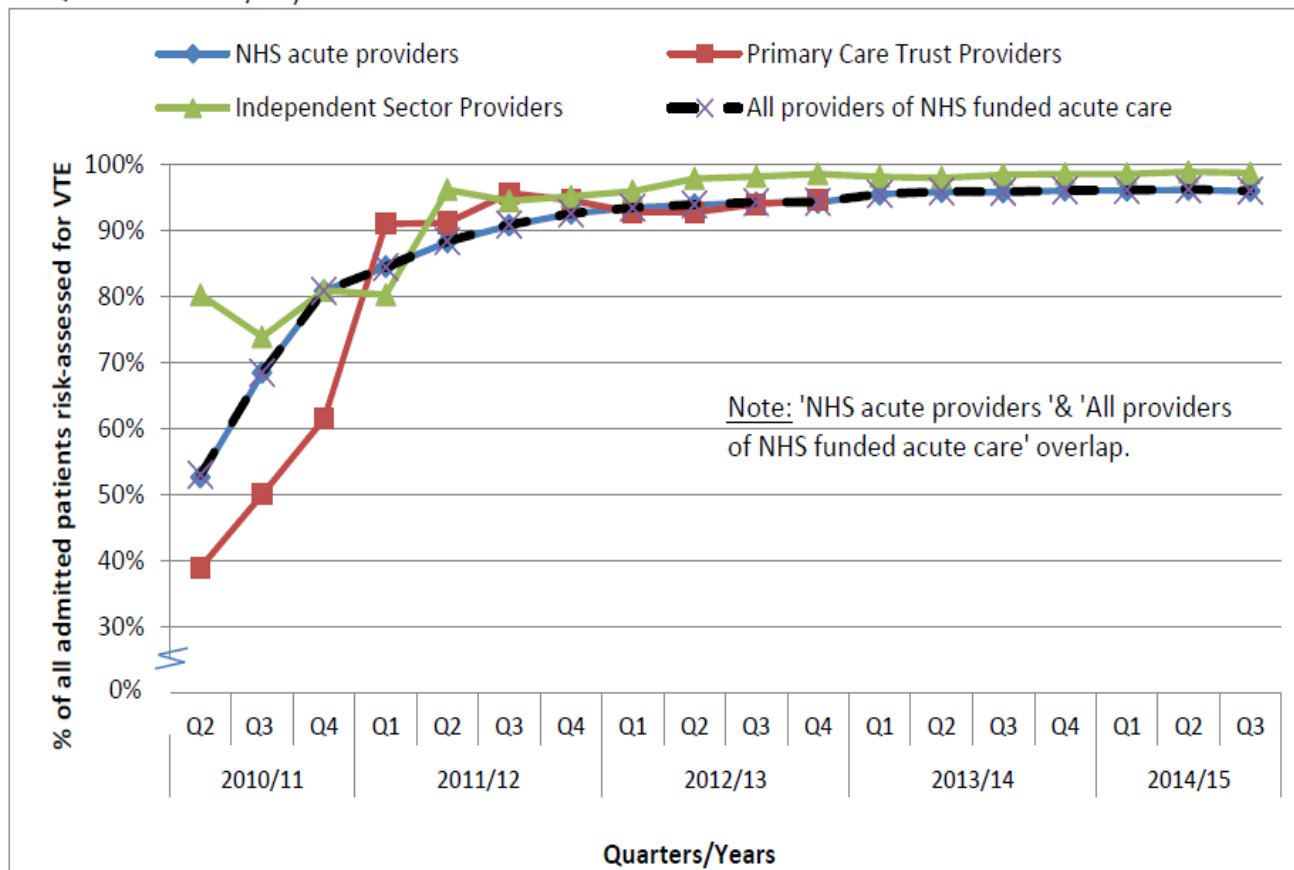
NHS England: Global Leaders

- ❑ Comprehensive, systematic approach to VTE prevention
- ❑ NHS England VTE Prevention Programme is the first national initiative of its kind anywhere in the world
- ❑ Key patient safety initiative:
 - ✓ Delivering high quality care
 - ✓ Reducing avoidable harm from VTE
 - ✓ Making hospitals safer
- ❑ Leadership from NHS, parliamentarians, charities....
- ❑ Striving for excellence – VTE Exemplar Centres Network
- ❑ Delivered change, enabled by levers provided by NHS
- ❑ Risk Assessment rates have risen from <50% in 2010
- ❑ Now stand at 96%



The impact of CQUIN

Figure 1: Proportion of adult hospital admissions risk assessed for VTE, England (Quarter 2 2010/11 to Quarter 3 2014/15)



Former national CQUIN indicators

- 34.15 Where national CQUIN indicators have been in place for a number of years, with most providers having embedded the good practice described in the indicator within their local working arrangements, it is normal for the indicator to be retired from the national CQUIN scheme, with its place taken by new, more challenging national indicators.

45

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- 34.16 In such cases, additional requirements in relation to the 'retired' indicators will be included in the NHS Standard Contract – and this is now the case for three such indicators.
- **Venous Thromboembolism (VTE).** The national quality requirement (set out in Schedule 4B) remains that acute providers must undertake risk assessments for at least 95% of Service Users each month, with financial sanctions applying where this is not achieved. Requirements to undertake root cause analyses and audits of provision of prophylaxis are set out in SC22, and the provider must report on these under the Reporting Requirements (Schedule 6B).

VTE Risk Assessment is a National Quality Requirement

NHS Standard Contract 2015/16

Schedule 4B:

VTE risk assessment: all inpatient Service Users undergoing risk assessment for VTE, as defined in Contract Technical Guidance	95%	Review of monthly Service Quality Performance Report	Where the number of breaches in the month exceeds the tolerance permitted by the threshold, £200 in respect of each excess breach above that threshold
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Service Conditions in the Contract

2015/16 NHS STANDARD CONTRACT SERVICE CONDITIONS

<p>SC22 Venous Thromboembolism</p> <p>22.1 The Provider must:</p> <ul style="list-style-type: none"> 22.1.1 comply with Guidance (including NICE Guidance) in relation to venous thromboembolism; 22.1.2 perform Root Cause Analysis of all confirmed cases of pulmonary embolism and deep vein thrombosis acquired by Service Users while in hospital (both arising during a current hospital stay and where there is a history of hospital admission within the last 3 months, but not in respect of Service Users admitted to hospital with a confirmed venous thromboembolism but no history of an admission to hospital within the previous 3 months); and 22.1.3 perform local audits of Service Users' risk of venous thromboembolism and of the percentage of Service Users assessed for venous thromboembolism who receive the appropriate prophylaxis, <p>and the Provider must report the results of those Root Cause Analyses and audits to the Co-ordinating Commissioner.</p>	<p>A</p>
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Going beyond Risk Assessment...

- Reducing harm from VTE is about so much more than just 'ticking the risk assessment box'
- Need to 'get behind' the headline data
- Need to look at the **quality of care** that patients are receiving
- **NICE QS3**

What does Best Practice look like?..

	NICE Quality Standard for VTE Prevention (QS3)
1	All patients, on admission, receive an assessment of VTE and bleeding risk using the clinical risk assessment criteria described in the national tool
2	Patients/carers are offered verbal and written information on VTE prevention as part of the admission process.
3	Patients provided with anti-embolism stockings have them fitted and monitored in accordance with NICE guidance.
4	Patients are re-assessed within 24 hours of admission for risk of VTE and bleeding.
5	Patients assessed to be at risk of VTE are offered VTE prophylaxis in accordance with NICE guidance
6	Patients/carers are offered verbal and written information on VTE prevention as part of the discharge process.
7	Patients are offered extended (post hospital) VTE prophylaxis in accordance with NICE guidance

Getting behind RA data....

- Commissioners: use available contracting levers to drive up quality and include quality statements in service specifications
- Primary Care: important role to play pre-elective admission & post discharge - ensuring appropriate pathways are in place so that patients with suspected VTE are seen in a timely fashion
- Exemplar Centres: important role in leading improvement locally



VTE Exemplar Centres

Providing leadership in thrombosis care

Please select the location for more information:

- BMI HEALTHCARE GROUP
- BOLTON NHS FOUNDATION TRUST
- CAMBRIDGE UNIVERSITY HOSPITALS
- CHELSEA AND WESTMINSTER CHESTER
- CHESTERFIELD ROYAL HOSPITAL
- COLCHESTER HOSPITAL UNIVERSITY
- KING'S THROMBOSIS CENTRE
- LEICESTER UNIVERSITY HOSPITALS
- NORFOLK & NORWICH
- OXFORD UNIVERSITY HOSPITALS
- PAPWORTH HOSPITAL
- PLYMOUTH (DERRIFORD HOSPITAL)
- PORTSMOUTH
- QUEEN ELIZABETH HOSPITAL KING'S LYNN
- ROYAL CORNWALL HOSPITALS
- SALISBURY DISTRICT HOSPITAL
- SHEFFIELD TEACHING HOSPITALS
- SOUTH TYNESIDE
- SOUTHAMPTON
- SPIRE ALEXANDRA HOSPITAL
- UNIVERSITY HOSPITALS BIRMINGHAM

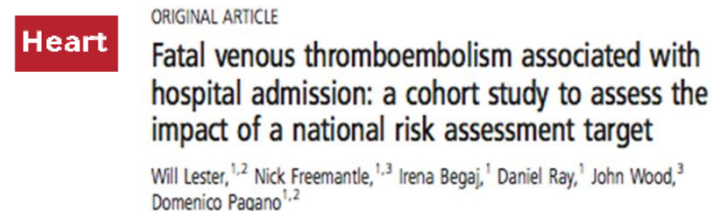
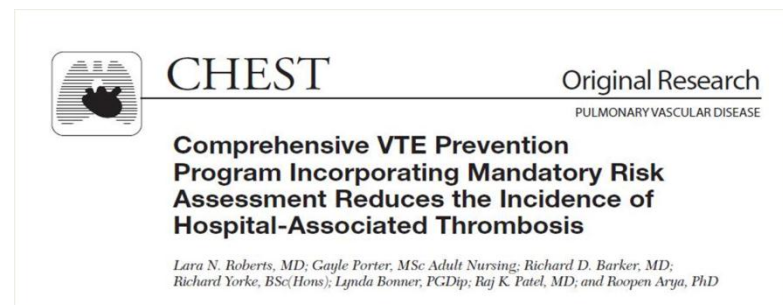


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Improving Outcomes

Improvement has been demonstrated. Corroborated by 3 studies:

- QI data at trust level: increased risk assessment, decrease in rates of HAT, increased rates of appropriate TP, reduction of inadequate prophylaxis,
- QuORU: 15% reduction in mortality nationally when 90% risk assessment goal reached
- Catterick & Hunt: in 2011 & 2012, around 940 deaths owing to VTE have been avoided in England.



Blood Coagulation and Fibrinolysis 2014, 25:00–00

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

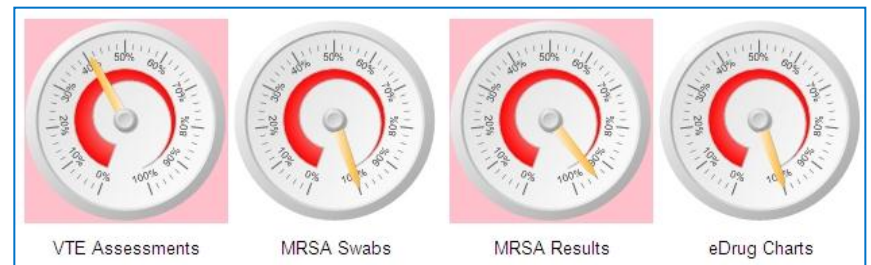
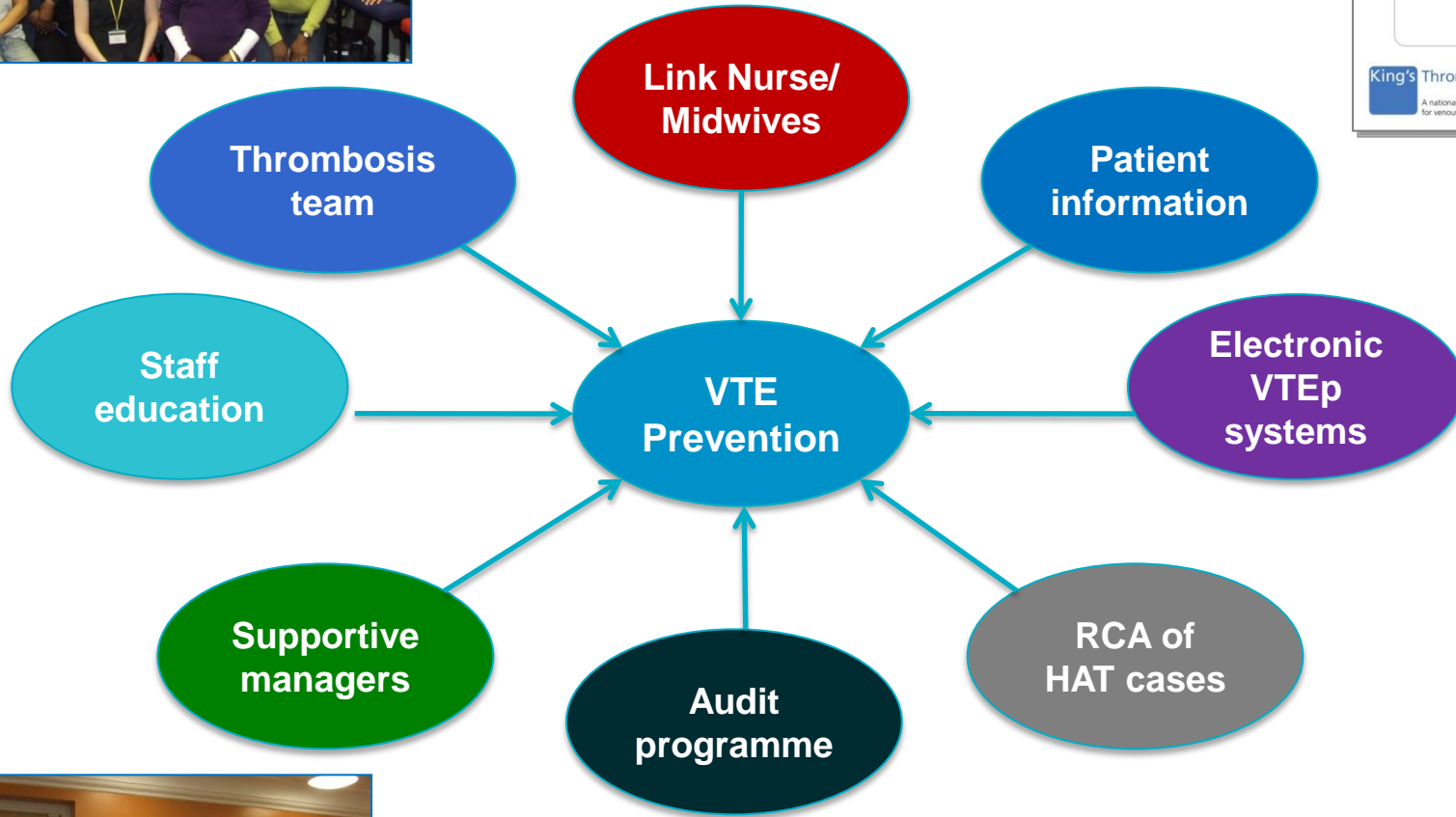
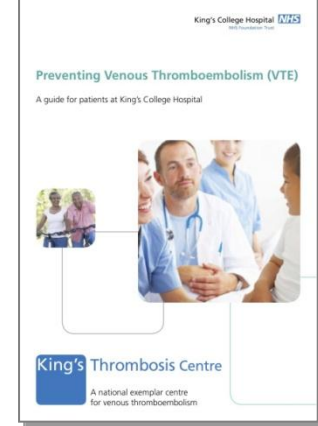
David Catterick^{a,b} and Beverly J. Hunt^c

Case Study: King's College Hospital



- Thrombosis committee established 1999 – an instrument for clinical governance and driving change
- Leader of VTE Exemplar Centres Network established 2007
- Director King's Thrombosis Centre is clinical lead for the National VTE Prevention Programme and chair of VTE Board
- Considers programme to be the largest successful quality improvement initiative in the NHS over last 20 years
- Continuous monitoring of outcomes:
 - VTE risk assessment is key performance indicator
 - Regular audit vs NICE VTE prevention Quality Standard
 - Registry for RCA of cases of hospital-associated thrombosis

Preventing VTE





CHEST

Original Research

PULMONARY VASCULAR DISEASE

**Comprehensive VTE Prevention
Program Incorporating Mandatory Risk
Assessment Reduces the Incidence of
Hospital-Associated Thrombosis**

*Lara N. Roberts, MD; Gayle Porter, MSc Adult Nursing; Richard D. Barker, MD;
Richard Yorke, BSc(Hons); Lynda Bonner, PGDip; Raj K. Patel, MD; and Roopen Arya, PhD*

VTE Prevention Programme Reduces Hospital-Associated VTE

- **QI project at King's College Hospital 2010-12**
- Mandatory, documented VTE risk assessment, thromboprophylaxis & guidance
- Mandatory VTE education
- identification of hospital-associated VTE via root cause analysis

	2010-11	2011-12	<i>p</i>
VTE risk assessment	63% (38-88)	93% (90-97)	
HA-VTE	236 19.7/month	189 15.8/month	<i>0.014</i>
Inadequate prophylaxis among HA-VTE	37%	21%	<i>0.005</i>

The importance of Ongoing Education

- Over the last 12 months, the national programme has been working in partnership with HEE to develop suite of e-learning modules
- Aimed at:
 - Secondary Care
 - Undergraduates
 - Commissioners
 - Primary Care
- Launched November 2014
- Free to access on e-LfH
- <http://www.e-lfh.org.uk/programmes/vte>

Venous Thromboembolism (VTE) Prevention

A 15-minute e-learning course designed for hospital training programmes



**AUTHORS: Dr Lara Roberts
Professor Roopen Arya**

This e-learning resource is designed to help nurses, pharmacists and junior doctors understand quickly the concept of hospital-associated venous thromboembolism, how to prevent it and to identify which steps of the prevention pathway are necessary to audit.



VTE PREVENTION ENGLAND

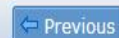
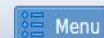
King's Thrombosis Centre
King's College Hospital **NHS**
NHS Foundation Trust

**Third edition
(May 2013)**

The programme in its original format belongs to King's College Hospital NHS Foundation Trust and intellectual property ownership of the original work belongs to Roopen Arya.

Developed with the assistance of Edge Medical (www.madebyedge.com)

Common Risk Factors for VTE during Hospitalisation



8 / 23



There are many [risk factors](#) for developing VTE when hospitalised. Some are pre-existing patient related factors, which are usually not reversible, e.g. advanced age, or a carrier of a particular type of thrombophilia (e.g. Factor V Leiden) and some are related to the reason for admission to hospital, e.g. orthopaedic surgery leading to prolonged immobility or community acquired pneumonia requiring a hospital admission in an elderly patient.

The risk of VTE in a hospitalised patient depends not only on the reason for their hospital admission, but also on pre-existing patient-related factors.

Some VTE risk factors are gender specific. For example, the gravid state is a well-recognised risk factor for VTE. For many years in the Western world, thrombosis and thromboembolism have been the leading causes of direct maternal morbidity and mortality. Risk assessing pregnant women for VTE is important throughout pregnancy and the postnatal period, and when appropriate, preventative measures should be prescribed.

Some risk factors can extend beyond their hospital admission. For example, elective orthopaedic surgery is a recognised risk factor for the development of VTE. In such patients, preventative measures extend beyond their hospital admission until the risk is thought to have diminished, and therefore pharmacological thromboprophylaxis is prescribed for up to 5 weeks post procedure.



Summary Checklist

Menu

← Previous

14 / 15

Next →

Here is a quick checklist that commissioners can use when engaging with providers on the subject of VTE prevention. *Click on the checkbox.*



<input checked="" type="checkbox"/>	Ensure that sanctions are applied for breaches of the threshold of 95% in the National Quality Requirement for VTE Risk Assessment, or consider using the flexibility that is now available to commissioners in the contract through local variation to determine how good performance can be incentivised
<input checked="" type="checkbox"/>	Ensure that providers are meeting SC20 in the NHS Standard Contract by requesting evidence of audits that have been undertaken locally to determine the percentage of patients receiving appropriate prophylaxis following VTE risk assessment. This will identify areas for improvement and ensure that risk assessment is not just a 'tick box exercise'
<input checked="" type="checkbox"/>	Ensure that providers are meeting SC20 in the NHS Standard Contract by requesting a report on the results of root cause analysis carried out on confirmed cases of VTE acquired by Service Users while in hospital. This will provide you, the commissioner, with a clear understanding of the number of cases of hospital acquired thrombosis in your local population and figures that can be used to monitor improvement in outcomes for patients
<input checked="" type="checkbox"/>	Consider using the measures within NICE QS3 to negotiate contracts and establish KPIs in service specifications. This will provide a baseline from which improvement can be measured and rewarded - enabling you the commissioner to address any gaps in service provision, support best practice and encourage evidence-based treatment and care in VTE prevention
<input checked="" type="checkbox"/>	Consider the use of local CQUINs for VTE prevention to incentivise performance
<input checked="" type="checkbox"/>	Ensure that appropriate metrics for VTE are included in local patient safety / quality dashboards and in terms of penalties for not reporting , consider the use of contract queries and performance notices

Presentation of VTE

Menu

← Previous

10 / 38

Next →

Click on the links below.

It is important to consider the possibility of DVT or PE in patients with the following clinical features, particularly if they are at increased risk of developing VTE, which includes the period after a hospital admission (3 months):

- [Presenting features of DVT](#)
- [Presenting features of PE](#)

These symptoms may be very subtle and therefore knowledge of risk factors is essential.

Patients with suspected VTE should be investigated and treated in a timely manner. If there is a delay in investigations being performed, an interim therapeutic dose of anticoagulation should be given.

For further information, please refer to NICE Quality Standard 29: The Diagnosis and Management of Venous Thromboembolic Diseases.



This picture shows skin changes that can be associated with chronic raised venous pressure from a previous DVT. These patients can develop new DVT and may describe an increase in pain or swelling.

Patient Empowerment

Providing Information for patients/families/carers goes hand in hand with professional education & engagement

NHS Choices:

- Self-Assessment tool
- Paul Robinson story in Video

www.nhs.uk/bloodclots

VTE assessment

Are you at risk of blood clots?

Venous thromboembolism (VTE) is a condition where a blood clot forms in a vein. This is most common in a leg vein, where it's known as deep vein thrombosis (DVT). A blood clot in the lungs is called pulmonary embolism (PE).

Clots are unusual. Your chance of developing them increases if you're immobile and unwell or need surgery.

Use this tool to check if you're at risk of VTE and find out the simple things you can do to reduce your risk.

Start

NHS choices Your health, your choices

Enter a search term

Health A-Z | Live Well | Care and support | Health news | Services near you

Venous thromboembolism (VTE): Paul Robinson's story

Share | Facebook | Twitter | Save | Subscribe | Print

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: 1,400

Comments & Ratings: 0 comments | 0 ratings

Credits:

Media last reviewed: 19/11/2014
Next review due: 19/11/2016

Search videos and audio: Go

VTE self-assessment

“I hope that me telling my story makes people think and that it helps even a few..”

Paul Robinson,
Blackburn Rovers & former England International
Goalkeeper

