HEALTH SERVICE JOURNAL hsj.co.uk

HSJ VTE PREVENTION

AN HSJ SUPPLEMENT/7 APRIL 2011

IN ASSOCIATION WITH THE ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP AND THE DEPARTMENT OF HEALTH

BLOOD AND SWEAT

THE HARD WORK THAT IS NEEDED TO BEAT HOSPITAL-ASSOCIATED VENOUS THROMBOEMBOLISM

DH Department of Health

All-Party Parliamentary Thrombosis Group

This supplement accompanies 'VTE prevention: A national leadership summit', 30 March 2011

Jointly chaired by Professor Sir Bruce Keogh, NHS medical director and Andrew Gwynne MP, chair, All-party parliamentary thrombosis group

CONTENTS

Supplement editor
Jennifer Taylor
Production editor
Amit Srivastava

ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP

Insight Public Affairs is supported by Bayer plc, Boehringer Ingelheim, Leo Parma, Pfizer and sanofi-aventis by way of a grant to provide secretariat and administrative services to the APPTG.

FOREWORD

Innovative measures will save lives

The Department of Health and All-Party Parliamentary Thrombosis Group have worked hard together over the past five years, to make VTE prevention a priority in our hospitals.

This government's ambition for the NHS is to provide evidence based, high quality care that delivers the best possible outcomes for patients. While the often clinically silent nature of VTE means it is hard to estimate its exact human cost, there is widespread agreement that many of the thousands of recorded deaths attributable to VTE in hospitals each year in England are avoidable.

VTE prevention has an obvious role to play in delivering high quality, safe and effective care for patients.

VTE prevention is also a practical example of how empowered clinicians can innovate to deliver high quality care. I know that in many hospitals clinicians are doing groundbreaking work in VTE prevention. I would encourage these trusts to share their experiences through vehicles such as the DH VTE prevention programme exemplar network.

This sort of innovation will be essential to improve productivity and to release the significant efficiency savings the NHS must make in the coming years. But, most of all, it will help to deliver the safe and high quality care that is necessary to improve outcomes for patients.

Making VTE prevention the norm across the NHS will be supported by the NICE quality standard for VTE prevention, one of the first such quality standards to be published. These standards provide the NHS with an authoritative outline of best practice in a given disease area.

The VTE standard will be used to frame the commissioning process with a focus on reducing VTE, as included in the first NHS Outcomes Framework. This will ensure VTE prevention remains a patient safety priority for the DH, NHS Commissioning Board and GP consortia. I also expect VTE prevention to remain a key issue for the regulators – the Care Quality Commission and Monitor as well as for the NHS Litigation Authority.

These actions demonstrate the commitment of the DH in supporting the NHS as it delivers the national VTE prevention programme – already considered the most innovative and comprehensive of any healthcare system in the world – ensuring that we reduce the incidence of VTE and deliver improved patient outcomes.

Simon Burns MP, minister of state for health

New NHS must keep up the good work

Many of us committed to the campaign to prevent hospital acquired VTE know of friends, relatives or colleagues who have suffered a deep vein thrombosis or pulmonary embolism acquired in hospital. This is certainly true for me and established my motivation to stand as chair of the All-Party Parliamentary Thrombosis Group.

The most striking thing about these stories of hospital acquired VTE is that they could have been, in most cases, prevented.

VTE is a terrible condition. Blood clots form quickly and often silently. In the worst instance, VTE can result in death. For those who survive, there are long term and often severe complications which can have a devastating impact on quality of life. Ultimately, VTE prevention is all about reducing avoidable death and long term ill health.

We have long known of safe, effective and cost efficient methods of VTE prevention. In 2005, the health select committee estimated that hospital associated VTE contributed to more than 25,000 avoidable deaths in England each year, and cost the NHS £640m a year to manage. The scale and cost of avoidable hospital acquired VTE – financially and in terms of long term morbidity and lives lost – is staggering.

The APPTG has therefore welcomed the significant national measures to help reduce hospital acquired VTE introduced by the NHS leadership, including the national CQUIN VTE goal and the provisions on VTE prevention in the Standard Contract for Acute Services. We have also welcomed the best practice guidance from the National Institute for Health and Clinical Excellence and NICE's quality standard on VTE prevention.

The APPTG will continue to work with NHS decision makers and clinicians to ensure that this wealth of best practice and policy is consistently and effectively implemented. Moving forward, the challenge will be to ensure that the opportunities presented by the new NHS structure deliver a reduction in the incidence of hospital acquired VTE, and a legacy of quality VTE prevention in patient care that we can be proud of.

Andrew Gwynne MP, chair, All-Party Parliamentary Thrombosis Group

DEATHS WE CAN AVOID

It's a problem that went unrecognised for decades – but new measures should mean NHS hospitals lead the world in tackling VTE

National efforts to prevent deep vein thrombosis and pulmonary embolism – together known as venous thromboembolism – began more than five years ago after the House of Commons health select committee in 2005 identified more than 25,000 avoidable deaths occur per year in England from hospital associated VTE. At the same time John Smith, then MP for Vale of Glamorgan, formed the All-Party Parliamentary Thrombosis Group when a constituent died from an avoidable DVT.

Since then, the parliamentary thrombosis group has led the campaign to prevent VTE, helping to increase understanding and the profile of the issue. "It is a patient safety issue and a cause of avoidable death which has gone unrecognised for decades in terms of its severity and its priority," says national clinical director for VTE Dr Anita Thomas OBE. "We've known for decades that it's important [and] that we have a cost-effective, cheap and safe way of preventing this happening and yet we haven't done so."

A system was needed to identify patients at risk of VTE and deploy measures to reduce that risk. The Department of Health published a risk assessment template for use in all English hospitals in September 2008 and again in March 2010. This template includes risk factors set out in NICE Clinical Guideline 92 – VTE guidelines developed by the National Institute for Health and Clinical Excellence in January 2010.

It is now effectively mandatory for every patient admitted to an English hospital to be risk assessed for VTE – something achieved through the introduction of a national Commissioning for Quality and Innovation (CQUIN) goal on VTE risk assessment. Trust provider units must also report data about this, collected by the DH through a system called UNIFY. This will provide a picture of who is at risk, how many people are at risk and what is being done about it,

'IT IS SAD THAT MEDICAL LEADERS HAD TO ASK THE GOVERNMENT TO ENFORCE GOOD PRACTICE'

Professor Sir Bruce Keogh, NHS medical director

During the national VTE leadership summit in 2009, hosted jointly by the All-Party Parliamentary Thrombosis Group and the chief medical officer, I was asked a rather unsettling question by senior clinicians – including the presidents of two royal medical colleges. Why, given that the scale of the problem of avoidable deaths from VTE has been well documented over the last three decades, had the government not yet mandated measures to prevent VTE in hospitals?

It struck me as a sad irony that leaders of the medical profession felt they had to ask the government to enforce good clinical practice. It seemed to me that the key to resolving this problem would be to seek a sea change in professional and organisational attitudes. The former required visible and upfront leadership from medical royal colleges, while the latter required the NHS Leadership to use system levers to support VTE prevention that acknowledged the devolved nature of the modern NHS.

In the months that followed, NHS leaders and the national quality board established VTE prevention as a priority for the NHS. A unique partnership was forged between the Academy of Medical Royal Colleges, the Royal College of Nursing and the Royal Pharmaceutical Society (the Three Professions Group) to tackle this issue.

Sir Liam Donaldson, then chief medical officer, had described VTE as "a significant international patient safety issue" and had already established an independent expert working group, preparing the ground for the launch of the national VTE prevention programme.

Through the NHS leadership, we have brought in measures to reduce hospital associated VTE. This includes a second year of a national Commissioning for Quality and Innovation VTE prevention goal supported by a national mandatory risk assessment data collection. We have an internationally recognised DH prevention programme, including an NHS exemplar centre network. The National Institute for Health and Clinical Excellence has isssued clinical guidance and a VTE prevention quality standard is already in place. The Three Professions Group is also producing specialty-specific guidance.

Taken together these measures have resulted in the most comprehensive suite of activities to prevent hospital associated VTE of any healthcare system anywhere in the world.

In November 2010, the national quality board system alignment sub group published a number of recommendations aimed at embedding VTE prevention in mainstream NHS activity by April 2012. We have established a VTE board to work with a wide range of partners over the next year to implement these recommendations and to report to the national quality board on progress.

Our continued aim is to ensure that all adult patients admitted to hospital are risk assessed for VTE and provided with appropriate prophylaxis based on national clinical guidance. Contractual requirements for acute providers to support local audit of prophylaxis and root cause analyses of confirmed hospital associated VTE will help identify gaps in the system – the same successful approach used to prevent hospital associated infections.

I know some find these measures tough but we all have a moral, professional and social responsibility to address a longstanding issue of this magnitude which puts patients at unnecessary risk of avoidable death, long term disability and chronic ill health.

January 2010
NHS Operating Framework specifies VTE prevention as a national CQUIN goal

March 2010
Updated national VTE risk assessment tool

April 2010
Academy of Medical Royal Colleges statement on VTE

June 2010
Mandatory risk assessment data collection linked to CQUIN goal begins

June 2010
VTE exemplar centre network increases to 16 centres

NHS National Patient Safety Agency

June 2010
NPSA '10 for 2010 harm reduction programme launches with focus on anticoagulation and VTE prevention failures

2010

January 2010
NICE Clinical Guideline 92: reducing the risks of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in patients admitted to hospital

April 2010
NHS Standard Contract requires acute service providers to audit VTE prevention and undertake root cause analysis

June 2010
Update of Map of Medicine VTE prevention pathway

June 2010
Andrew Lansley recognises significance of VTE in headline speeches

making England a world leader in collecting such information. The NHS Outcomes Framework for 2011-12 also includes a measure of hospital-related VTE.

Meanwhile, the NICE quality standard for VTE prevention covers more than risk assessment and prophylaxis. It also includes patient awareness and experience "because that is a very important untapped source of helping us to understand and deal with this problem," says Dr Thomas.

Quality standards developed by NICE define what a good service looks like. Commissioners can use them to evaluate existing services or commission new ones. Based on NICE Clinical Guideline 92, NICE's VTE quality standard was one of the first four to be produced.

"The aim is to have produced a set of standards which can be used not only to monitor and guide commissioning but also to improve and drive things forward," says Professor Gerard Stansby, chair of the VTE prevention quality standard topic expert group. "And perhaps then try and align those standards with other drivers in the NHS, such as CQUIN, in order to reward the trusts or units that are coming closest to the standards."

'Raising public awareness about VTE would prime people to expect a risk assessment if they end up in hospital'

It's quite likely that they will tweak the standards at some point, he adds. It has become clear they will become key to improving quality, so it needs to be clear how each standard could be measured. Just as CQUIN sets a goal to risk assess 90 per cent of patients admitted to hospital, Professor Stansby suggests that benchmarks could be set for NICE quality standards, allowing organisations to be compared.

This means if somebody wants to use them "for contracting or commissioning, or just for auditing... then they've got things they can actually measure properly," he says.

The DH VTE board, led by Dr Thomas, is leading VTE work nationally. The work on patient awareness and experience is being led by Sally Brearley, who is also a lay member of the national quality board, and Professor Beverley Hunt, professor of thrombosis and haemostasis at King's College London, consultant in the departments of haematology, pathology and lupus at Guy's and St Thomas' Foundation Trust, and medical director of Lifeblood: The Thrombosis Charity. They have been charged with ensuring that patients have adequate information.

The man on the street identifies blood clots with long haul flights. "They don't realise that you are up to 1,000 times more likely to suffer a VTE by the simple act of getting yourself admitted to hospital," says Dr Thomas.

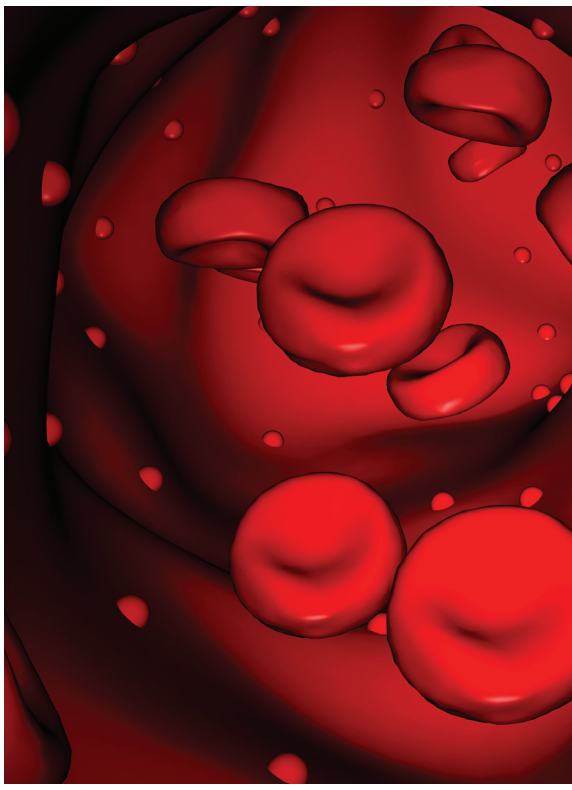
Professor Hunt and Ms Brearley are developing standard information about VTE that can be used by the various stakeholders, including GPs and hospitals. "That would need to be tailored in some way to local requirements but the basic information would be the same," says Ms Brearley.

"We're hoping to get the national VTE patient information leaflet for discharged patients finished and out by April 1," adds Professor Hunt. "We have to because [VTE risk assessment has been continued as a] CQUIN goal for [this financial year]."

The NICE quality standard mentions providing information on admission and discharge to patients but could also be given to elective hospital patients by GPs. Raising public awareness about VTE would prime people to expect a VTE risk assessment if they end up in hospital – and ask questions if it fails to happen. Ms Brearley hopes patient organisations, NHS Choices and other information providers will be interested in helping with this.

Another aspect to patient and public engagement is accountability. The VTE board hopes to develop support for Links, HealthWatch and overview and scrutiny committees to help hold providers and commissioners to account for what they are doing on VTE prevention. Such support could include suggesting ways of accessing data on VTE and suggesting questions they could ask about performance.

One of the new roles for local HealthWatch will be to provide information and support to patients and the public. Ms Brearley hopes that they will be willing to distribute the information now being developed on VTE.



July 2010
NICE quality standard on VTE prevention published

August 2010
Health secretary's letter to APPTG discusses 'shared aim of reducing avoidable death from VTE' in hospitals

November 2010
Dr Foster Good Hospital Guide rates hospitals on percentage of patients assessed for VTE and number of patients with PE

December 2010
NHS Operating Framework specifies VTE prevention will continue as national CQUIN goal

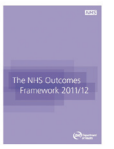
January 2011
Health and Social Care Bill 2011 impact assessment cites VTE death rate as a target for improvement

July 2010
NHS white paper and Outcomes Framework consultation outlines coalition vision for NHS reform and includes numerous VTE mentions

dr fosterhealth

October 2010
VTE and PE rates per 1,000 to become clinical effectiveness and safety metrics in *Dr Foster Good Hospital Guide*

December 2010
David Cameron answers parliamentary thrombosis group chair prime minister's question about VTE



December 2010
NHS Outcomes Framework includes indicator on VTE incidence

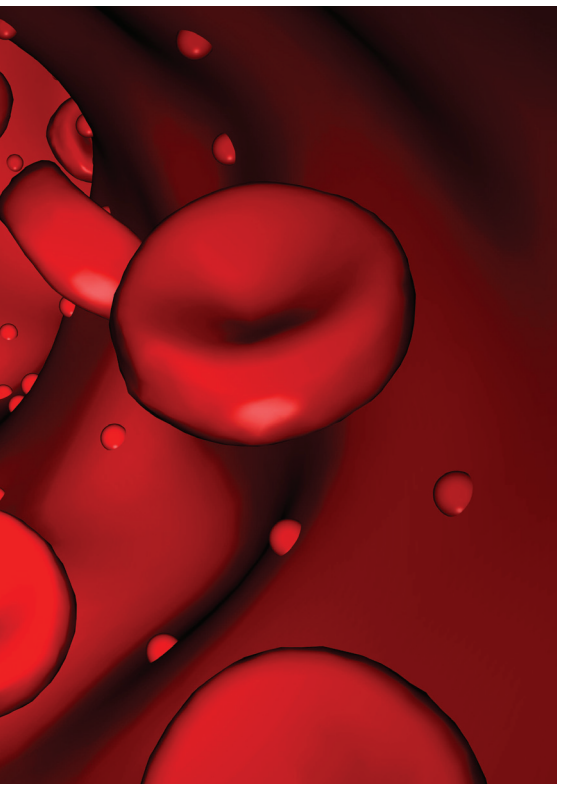
2011

How national policy has developed since the first VTE summit hosted by the chief medical officer and parliamentary thrombosis group in 2009

PROFESSIONAL LEADERSHIP

VTE is an issue that affects all patients and therefore needs to involve all professional groups. A partnership – called the Three Professions Group – has been formed between the Academy of Medical Royal Colleges, the Royal College of Nursing and the Royal Pharmaceutical Society to focus the NHS on implementing the VTE prevention programme. The ultimate aim is to make sure that patients are risk assessed and receive appropriate prophylaxis.

Nurses have a key role to play and will often be the ones who carry out risk assessment. The RCN brought together a group of nurses who work in thrombosis to identify areas to work on. The group identified a need for VTE education, particularly for more junior nurses, so the RCN developed an online, interactive resource that gives a basic understanding of the issue and its importance.



The RCN has also brought together all of the information about VTE on its website so it is easy for nurses to access, and profiled nurses doing good work in the area.

Geraldine Cunningham, head of the RCN's Learning and Development Institute, says people are more receptive to information from their professional body than from the DH. She adds: "We've worked really well together as a tri professional group and have been very committed to taking the agenda forward, and possibly would see ourselves doing it around other issues in the future."

Pharmacists have a responsibility to ensure that thromboprophylaxis medication, dosage and route are the most appropriate for a patient. They have an important role to play in making prescribing safe for patients and picking up errors and omissions.

The RPS's role is to link up with the other professional groups and develop a set of projects to support pharmacists and other professionals to make decisions on VTE.

Work is ongoing to create online continuing professional development and develop answers to frequently asked questions. Such projects will be developed in partnership with the other professional groups.

The RPS spokesperson on VTE Sharron Millen also chairs the haemostasis, anticoagulation and thrombosis group for the United Kingdom Clinical Pharmacy Association. The group has supported the development of Manchester University's learning at lunch package which is designed to help pharmacists deliver thromboprophylaxis.

Lobbying is an important role for professional groups, says John Black, president of the Royal College of Surgeons of England and VTE lead for the Academy of Medical Royal Colleges. In fact, much of the national work on VTE was kick started by lobbying (see Bruce Keogh, page 1).

'To see in a post-mortem a blood clot in the lungs that might have been prevented was pretty salutary'

A second role for the professional groups is to make sure that people maintain the highest standards of clinical practice. "What we're all doing is reminding people of the evidence base and the importance of this and getting out and about and telling our own membership," he says.

For surgeons the World Health Organization surgical safety checklist has been a powerful tool. For every surgical patient it demands a record of whether or not VTE prophylaxis has been given.

For the foreseeable future the CQUIN VTE goal will be a strong motivator for all trusts to make sure they are up to scratch with their practices in VTE. But it remains to be decided how long VTE will be part of CQUIN and leadership from professional groups will be essential in ensuring that this life saving work continues.

Bringing back routine hospital post-mortems would help, says Mr Black, who is lobbying the Commons health committee on this issue.

"What used to keep my generation on their toes was that when your patients died in hospital you would very often have a post-mortem examination," he says. "You would go along, and to see a blood clot in the lungs which might have been prevented was pretty salutary."

"But since the body parts scandals the routine hospital post-mortem service has been allowed to decline," he adds. "It's the ultimate audit and it was a very powerful clinical reminder of the importance of VTE prophylaxis." ●

ALAMY

COMMISSIONING

WHAT DOES GOOD CARE LOOK LIKE?

Those striving for better commissioning in VTE prevention need to ensure contracts state precisely what is needed and challenge a culture of acceptance

The commissioning arrangements for VTE prevention continue to be strengthened. The 2010-11 Commissioning for Quality and Innovation (CQUIN) goal to risk assess 90 per cent of inpatients has been continued for 2011-12. Significantly, monthly VTE data collection may be matched by monthly quality incentive payments. Unlike last year, commissioners can split payment for the VTE indicator into equal monthly amounts, with payment triggered by monthly achievement of the goal. This is designed to support a thoroughly embedded approach to risk assessment.

The 2011-12 Standard Contract for Acute Services includes an obligation for providers to report, where required by their local commissioners, on local audit of patients at risk of VTE who receive appropriate thromboprophylaxis, and root cause analyses of confirmed cases of hospital acquired VTE. Failure to report in line with these contractual obligations allows commissioners to withhold a percentage of contract value.

With increasing focus on quality in the NHS, a logical next step will be to write the

VTE quality standard into the acute contract, but this is yet to be decided by commissioners locally.

Information on VTE is collected through the UNIFY system but coding can be complicated. The World Health Organization's International Classification of Diseases codes are used by coders in the NHS to transfer the information in patient records into the hospital episode statistics. There are nearly 20 codes for VTE and while "it's not possible and it's not appropriate" to rewrite the international codes, says national clinical director for VTE Dr Anita Thomas, work on the metrics is ongoing.

"We have groupings endorsed by the Academy of Medical Royal Colleges around the ICD codes for acute VTE, chronic VTE and the hospital-associated VTE," says Dr Thomas. "We're getting to a clear definition [about] what those codes are."

A focus on what is clinically important in terms of outcomes requires looking beyond incidence and prevalence to patient safety practices. Work has begun to develop ways to evaluate and quality assure patient experience, awareness and understanding.

The Care Quality Commission uses national data produced by the Department of Health about the number and proportion of VTE risk assessments carried out on adult admissions to NHS funded acute care. This data, alongside other nationally collected data, and information from patients and the public, is fed into quality and risk profiles on each organisation. It is then used to identify where organisations may be at risk of not complying with CQC standards for quality and safety.

In relation to VTE this would mean looking at whether a provider was reducing the risks of people receiving unsafe or inappropriate care or treatment; whether they were assessing needs (undertaking appropriate assessments, including risk assessment), planning and delivering care in accordance with the assessments undertaken; and whether that care was based on published evidence – for example, guidelines/standards produced by the National Institute for Health and Clinical Excellence and by professional bodies.

"If a provider was found to be non-compliant, we would take appropriate enforcement action in relation to the risk," says CQC regulatory policy manager Karen Wilson. "We also work closely with the DH clinical director and lead for VTE to ensure we align how we work with any standards, data collections and policy that they produce."

CQC inspectors follow up potential risks revealed in the quality and risk profiles. If an investigation reveals a problem such as substandard VTE practices, this would be reported on the CQC website.

While the CQC looks at the elements of the NICE quality standard that relate to its own "essential" standards, Ms Wilson points out that the two are not the same. "The quality standard is meant to be describing very high quality care, your aspirational care, the things that you could expect over and above what you would see on a day to day basis," she says. "NICE quality standards are a higher level than the [CQC] essential standards."

The NHS Litigation Authority also has standards for VTE. The VTE risk management standard piloted in 2010-11 (the pilot finishes on March 31) has been incorporated unchanged as a full criterion (4.8) in the 2011-12 standards manual which was published at the beginning of January. The criterion applies to acute, community and independent sector organisations and will be part of the authority's formal assessment process from April 1.

Over the past five years around 140 VTE claims have been notified to the litigation authority each year, but it's important to note that a number of claims will relate to incidents in earlier years. The total estimated value of these claims, including damages and legal costs, was £112m (more than £22m per year).

"It is an area that does generate quite a number of claims and at quite a high cost," says Alison Bartholomew, risk management director at the authority. She adds that the standard was developed in consultation with NICE and reflects its guidance. "What we're trying to do is to support good practice implementation by taking that sort of information and putting it into our standards."

Good practice in VTE commissioning is already occurring in primary care (see best practice, page 7). The Royal College of General Practitioners has been exploring the role that GPs could play in helping to protect patients from VTE, particularly cases that are associated with hospital admissions.

"I think consortia might be very interested in commissioning work [around] what can be done in general practice prior to an admission," says VTE spokesperson Maureen Baker.

GP consortia could commission practices to carry out preoperative VTE screening for elective admissions, which could be done by a practice nurse or GP. The information would then be communicated to the hospital.

Much of the information that populates a VTE risk assessment – such as past medical history, smoking and BMI – already sits on GP systems. Commissioners will probably be interested in looking at how that information can most effectively be communicated into secondary care.

"I'm sure commissioning consortia will want to work with acute care providers to see what steps can be taken [on VTE]," says Dr Baker. "If collectively they feel one way of addressing this is to have better preoperative screening, GPs and practices might have a role in that and [in] facilitation of information between the general practice and the acute trust both in referral and discharge."

'Much of the information that populates a VTE risk assessment such as smoking and BMI already sits on GP systems'

Regional leadership on commissioning is being provided by NHS East of England and NHS South West, the two strategic health authorities that have acquired exemplar status (see best practice, page 7).

NHS East of England has driven an improvement programme by looking at trusts' returns on VTE prophylaxis to the UNIFY database. Each month medical directors and directors of nursing see the performance of all acute trusts in the region. "That in itself has driven a process of quality improvement," says NHS East of England medical director Dr Robert Winter. "We're seeing very substantially increased numbers of patients with proper VTE risk assessment and thromboprophylaxis."

The SHA's journey on VTE started with a system that showed great variation in

implementation between hospitals and within clinical teams to something that is recognised as an important part of high quality care for every patient who engages with the health system.

"We've got the same improvement process and culture that we've previously used with healthcare associated infections," says Dr Winter. "So it's everyone's responsibility to see that this is done for every patient and everyone is accountable for it."

The keys to their success in providing leadership on VTE have been a clinical working group on patient safety and making VTE an area that medical directors and directors of nursing take forward together. The SHA believes that clinical quality and patient safety are multidisciplinary issues and this is a perfect example of a problem that cannot be solved by doctors, medical directors or directors of nursing working in isolation.

The data about compliance in UNIFY is also shared with the SHA's commissioning team and with all PCTs in the region. Dr Winter says: "It's an added and significant incentive for organisations to invest in not just doing it correctly but also capturing the data correctly."

'There was a fairly embedded cultural issue that this has always happened, it's always going to happen'

The SHA has developed a regional campaign which is being implemented in nearly all of its 18 acute hospital trusts. The goal is to remind frontline staff to assess all inpatients for VTE risk and make sure they receive the recommended preventative treatment.

Created with focus groups of frontline clinical staff in four hospitals across the east of England, the campaign is based on a clear simple message: "VTE. Assess. Prevent." (see poster, above right)

NHS South West has developed a whole system approach to patient safety which includes VTE. The SHA's medical director Mike Durkin set up a steering group and an expert clinical faculty for VTE which brokered an agreement with all of its organisations that the SHA would conduct clinical peer review visits following self assessment of performance on VTE risk assessment and prophylaxis.

Self assessment in acute trusts began in November 2008, followed by independent sector treatment centres in February 2009 and primary care trusts in March 2009. Clinical peer review visits were carried out between April and June 2009.

"Around that peer review process we not only gained a huge insight into where the different organisations were across the South West but we also unearthed some really good elements of good practice," says Dr Durkin. Individuals were identified who were keen to improve care for VTE and take the whole patient safety agenda forward.

Poster for staff used in NHS East of England's "VTE. Assess. Prevent." campaign

The peer review visits revealed that staff were beginning to understand the degree of death and harm caused by VTE but Dr Durkin says: "There was a fairly embedded cultural issue that this has always happened, it's always going to happen, and therefore whatever you do it's not really going to move the bottom line in terms of reducing death and needless harm. That was across the whole of the professional workforce I think."

Starting to measure and audit was the greatest driver for improvement. At least 50 per cent of trusts did not have clear guidelines for their own staff on measurement and audit. The SHA used "plan, do, study, act" methodologies with small teams to make a difference in a ward or unit then broadened out to the hospital.

Improvement took another step when VTE risk assessment became a national CQUIN goal. Dr Durkin says: "With the best will in the world the system tends to move around contracts and money and I think having VTE as part of that national CQUIN element was fairly key to moving change."

From June to December 2010 the South West moved from assessing 51 to 78 per cent of inpatients for VTE risk according to UNIFY.

The SHA has found that a fruitful area for reduction of harm is mental health, particularly the inpatient population who have many physical co-morbidities.

"VTE risk assessment and prophylaxis is just as important in those groups particularly where those patients may already have either risk factors or for other reasons they're immobile," says Dr Durkin.

The whole pathway approach to VTE recognises that the responsibility for VTE prophylaxis often lies outside of hospital. The SHA has worked with PCTs to help them understand the processes of risk assessment and appropriate prophylaxis, that both should be in local contracts, and that this should be a constant question in their quality monitoring of the organisations they commission from.

The South West has a quality framework that commissioners use to assess provider organisations and VTE risk assessment and prophylaxis is one component.

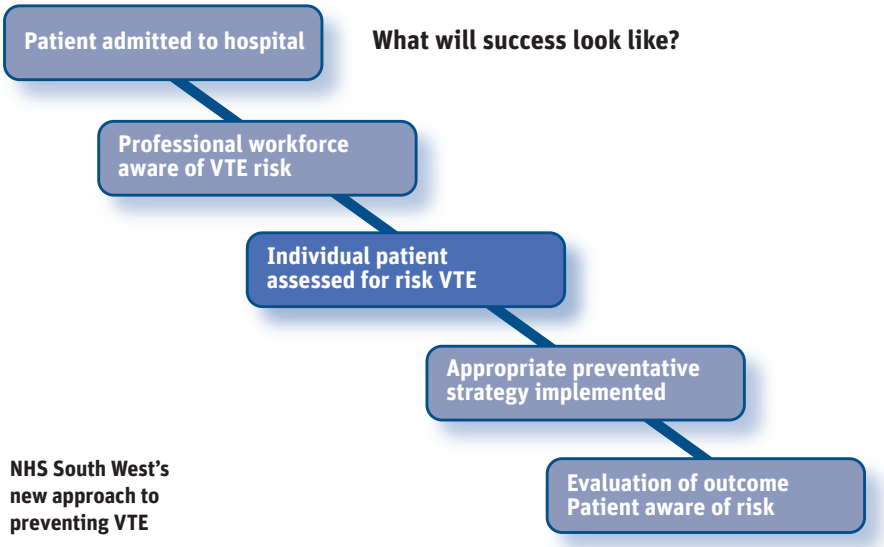
"A key issue for us is ensuring that the commissioner is aware of the issue and understands that they have just as much responsibility in delivering and supporting change as anybody else," says Dr Durkin. "And that they should be ensuring that they are contracting appropriately with their provider organisations."

At first it came as a challenge to many of the commissioning groups but now it's part of the region's architecture. A challenge for the future is to ensure that social enterprises are aware of their responsibilities around VTE.

As structures change in the NHS, a priority for the South West will be ensuring that the whole system approach of quality improvement in VTE and other areas is resilient to the upheaval. A programme board with three streams – acute, community programmes and mental health – is being led by expert faculty.

"Quality improvement, particularly geared around certain specific processes of safety, will be key for the new commissioning system," says Dr Durkin. "Our responsibility over the next transition phase as we move into a new commissioning architecture is that we don't lose the gains that we've got and that we allow the system to keep learning the good practice that they've done." ●

Developing a systems-based approach to the prevention of Venous Thromboembolism in hospitalised patients



NHS South West's new approach to preventing VTE

‘A REAL KITEMARK OF EXCELLENCE’

The 18 exemplar centres are a diverse group united by the goal of finding the most effective ways to prevent VTE and, crucially, spreading these throughout the NHS

THE NATIONAL VTE EXEMPLAR CENTRE NETWORK

As the NHS goes into the future, leadership will increasingly come from within. That philosophy is already being played out in the national VTE exemplar centre network, which provides leadership for the VTE prevention process from within the NHS and is an important component of the national VTE prevention programme.

The network was set up in 2007 to demonstrate and promote best practice and act as a bridge between national strategy and local implementation. Exemplar centres provide resources for NHS and independent healthcare through resource books, a website, regional and national workshops and a VTE e-learning course.

“The concept is to have models for both collaborative and multidisciplinary working across the country,” says Roopen Arya, lead of the national VTE exemplar centre initiative and director of the King’s Thrombosis Centre. “Being an exemplar centre is seen as being a real kitemark for excellence and all chief executives are aspiring for their trusts to be [one].”

Today there are 18 VTE exemplar centres that make up a diverse group including small and large acute trusts, a teaching PCT – NHS North Lancashire – and two strategic health authorities. NHS South West and NHS East of England both have comprehensive approaches to VTE prevention and have been working to make resources available, promote education and produce regional models for VTE prevention (see commissioning, page 4).

Organisations aspiring to exemplar status should apply to Dr Arya. Success depends on high standards of VTE prevention and care, management support at the highest level and willingness to share best practice, host visits and share resources. The exemplar centre criteria are set to be updated to include compliance with the CQUIN VTE goal and the NICE quality standard on VTE prevention.

As an exemplar centre in secondary care, King’s Thrombosis Centre was one of the first trusts to have a thrombosis committee and a thrombosis team, both of which are based on multidisciplinary working.

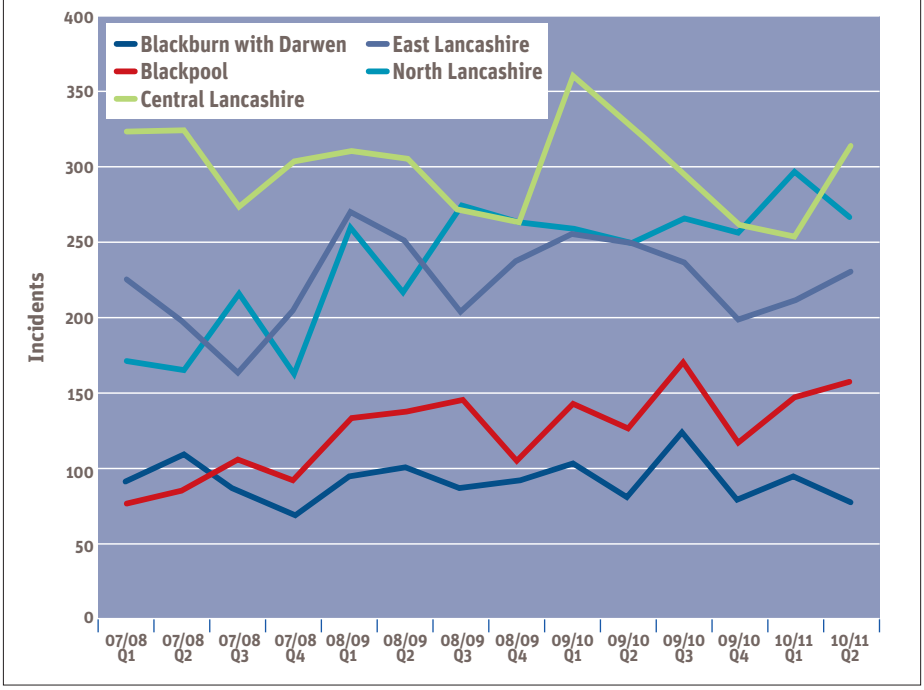
Over the years the trust has developed the roles of the different disciplines and professions in delivering VTE prevention. It originated the VTE link nurse model; just as there are infection control nurses, King’s has VTE link nurses as ward champions for VTE prevention. It also has a nurse consultant in VTE prevention and anticoagulation which again is quite unusual. Lynda Bonner also runs the national nursing and midwifery network, which falls under the VTE exemplar centre network umbrella.

Clinical research on improving VTE prevention and care is another priority. One study is examining outcomes and quality of life after deep vein thrombosis.

Root cause analysis of cases of hospital associated thrombosis has become an NHS priority and King’s has set up a collaborative study between several exemplar centres to examine the lessons of root cause analysis. “When all these financial targets are done

ALAMY

Total VTE incidents across Lancashire



There were 13,659 incidents of VTE across Lancashire from April 2007 to September 2010. The above graph shows the spread by PCT

and dusted and hopefully VTE prevention is embedded in the NHS and independent healthcare, we are going to need to move forward and improve what we do for patients," says Dr Arya. "I think the lessons from the root cause analysis are going to be very important."

King's managers have supported VTE work by including targets for VTE risk assessment on clinical performance scorecards. These are dealt with at the highest level and if a division is underperforming, measures can be put into place. King's also gives a monthly VTE award to an individual or ward that has performed well, and in March it will hold end of the year VTE prevention awards.

EXEMPLARY VTE PREVENTION BY COMMISSIONERS

NHS North Lancashire has been working on what PCTs as commissioners do to improve risk assessment and management of VTE. Initially that required compiling the right sources of information – including public health data and death certificates – to build up a picture of the incidence and prevalence of VTE at a PCT level.

"I assumed this was normal PCT commissioning activity," says medical director and professional executive committee chair Dr Jim Gardner. "What surprised us was that nobody else had done it, so when we started to present run charts of VTE incidence [people said] 'this is amazing, we haven't seen this before'."

They now have run charts on VTE incidence for the PCT and across Lancashire (see graph, above).

Dr Gardner's advice on tackling the commissioning aspects of VTE is to first look at the data in order to understand the incidence of VTE across the health economy.

'What surprised us was that nobody else had done it, so when we started to present run charts of VTE incidence people said "this is amazing"'

"Methodological rigour [is needed to make] sure we're talking about patients and not episodes of care," he says.

It's also important to look at the incidence of hospital acquired VTE, which accounts for at least half of VTE cases. The first step is to be clear about how hospital acquired VTE is defined. There has been some debate about the length of time patients are at risk post hospital discharge from VTE. There was a view that it was 56 days but data from the Million Women Study shows that there is a recognisable incidence of VTE up to 90 days after hospital discharge.

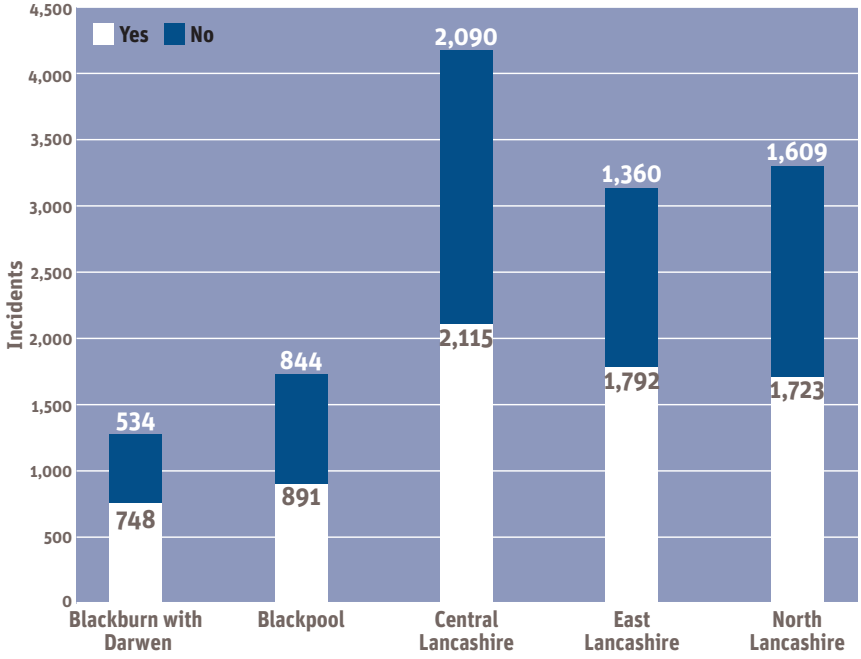
The PCT has compiled data on the percentages of potentially hospital acquired VTE across Lancashire (see graph, below). They can be used to show colleagues in secondary care that what goes on in hospital, such as VTE risk assessments, is really important.

From a quality improvement approach VTE is similar to MRSA and *C Difficile* in that it is a whole systems issue. "The whole health economy needs to think about it, not just hospitals," says Dr Gardner. "There are issues about risk assessment in primary care and there are issues about social marketing which play out in exactly the same way."

NHS Lancashire has become a patient safety node and acts as a learning facilitator with Advancing Quality, the quality improvement facility for the north west. The PCT hosts an action learning set on VTE which is principally across secondary care providers but does cover the wider health economy.

As an exemplar PCT, NHS Lancashire has moved a long way on VTE but there's still a lot of work to do. It is not yet seeing a change in the incidence of VTE despite apparent improvements in risk assessments and prophylaxis, a situation which makes Dr Gardner "cautious and rather anxious". He

Proportion of cases that were hospital acquired (within 90 days of discharge)



Overall 53 per cent of VTEs were hospital acquired. PCT scores were 58 per cent (Blackburn), 51 per cent (Blackpool), 50 per cent (Central Lancs), 57 per cent (East Lancs) and 52 per cent (North Lancs)

says: "I think we're undoubtedly improving risk assessment but we've got more work to do across the system."

EXEMPLARY VTE PREVENTION BY HEALTHCARE PROVIDERS

The key to Salisbury Foundation Trust's success as an exemplar centre is having agreement on a simple VTE risk assessment and thromboprophylaxis tool which is workable across the whole organisation.

"Our tool complies with the Department of Health's national risk assessment template and the risk assessment criteria set out in NICE Clinical Guideline 92 but it's slightly different from the national tool to fit in with what our local needs are," says haematology consultant Tamara Everington.

One example of local adaptation has been to incorporate the national risk assessment tool into the drug chart. Drug charts are easy to locate and are already checked daily by pharmacists and many times a day by nurses. It provides many opportunities for the VTE risk assessment to be done and checked by different members of the team.

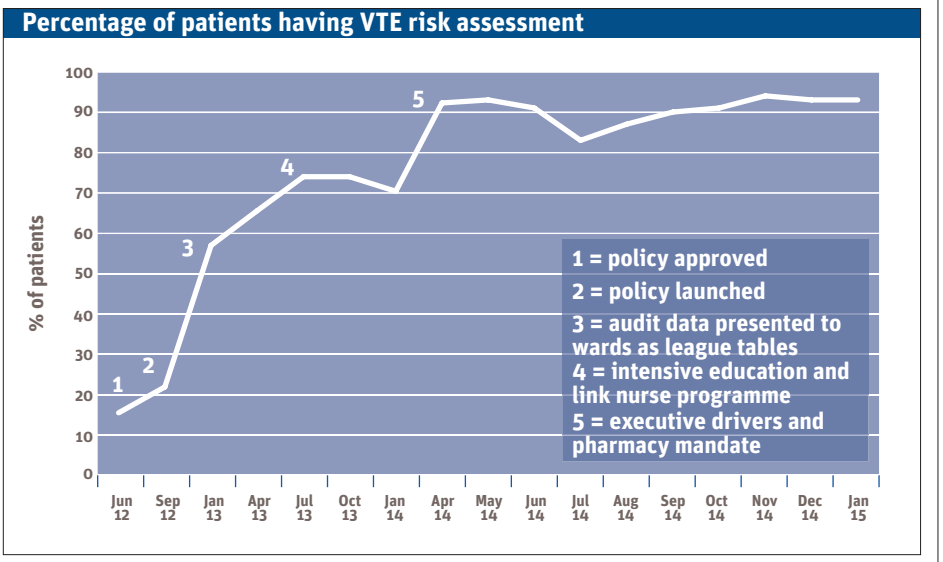
High level agreement on a VTE policy has been vital. Dr Everington took part in the NHS South West peer review process on VTE and saw that staff doing good work on their own could not achieve an impact across the organisation. The entire board needs to be on side.

At Salisbury, the chief executive, medical director, nursing director, non executive directors and governors are regularly informed about VTE performance. Run charts of performance are produced for each ward and each directorate holds a risk register. The directors of medical teams look at performance on risk assessments each month and hold under achievers to account.

Involvement at the top is important because people across the entire organisation need to believe that it's important. "The danger always with VTE risk assessment is that it becomes yet another annoying piece of paper to fill in to add to the massive amount of bureaucracy that we all do," says Dr Everington. "It's very important that people understand that this is making a difference."

In addition to producing charts of performance by ward, the trust regularly produces data on the incidence of secondary VTE. They have shown a 50 per cent drop in secondary VTE since achieving a high level of compliance with the VTE risk assessment. It's a visually powerful way of motivating clinical staff because they can see the difference the risk assessments have made.

Dr Everington spends a lot of time working with different groups across the organisation to achieve good practice in VTE given the evidence that's available. "We're still feeling our way with thromboprophylaxis," she says. "The scales have tilted full pelt towards giving everybody thromboprophylaxis and there will be a cost to pay for that. We need to understand better where we could afford to back off, where the risk of thrombosis is outweighed by the bleeding risk so the standard risk factors simply don't apply."



Each step in Salisbury's VTE journey has led to a higher proportion of patients risk assessed for VTE

Salisbury does root cause analysis of every thrombosis event in the hospital. That means picking each case apart, looking at where errors might have occurred and then feeding that back to the local department. They also look at all the incidents where bleeding has occurred. That's all about involving people in the improvement process so they don't feel that arbitrary decisions are being imposed on them.

The root cause analysis and interpreting incidents has been important for staff education. "If you can feed them back a real case and take it apart a bit, particularly someone they've got direct experience of, they will learn a great deal more from that [than a lecture]," says Dr Everington.

She says education often gets too complicated and should focus on relaying the key messages about what needs to be achieved. It's not essential for all staff to understand in detail how a clot develops or propagates. They should understand how to risk assess their patients, give thromboprophylaxis and recognise VTE.

'The danger always with VTE risk assessment is that it becomes yet another annoying piece of paper to fill in'

Patient education also needs to focus on the key messages. Salisbury had a detailed patient information leaflet about VTE but found few patients were reading it. It has now been simplified into a one-sided, colour laminated sheet with pictures and limited text. It focuses on the actions that can be taken to prevent or recognise a VTE event.

A detailed information booklet is available for patients on request and Salisbury is set to launch a website for further information.

The trust has also been using self assessment for VTE risk in its day case patient population. This works less well for inpatients because many are too sick to consider the issues but for day cases working through their own risk stimulates patients to think about what they might do to help themselves.

Salisbury has designed a new VTE tool for maternity patients who can be inpatients, day cases or outpatients. Until now much of the work on VTE has been in secondary care but Dr Everington believes that in the future the system should be integrated with primary care. Maternity patients have a shared care record and have provided an opportunity to try out such an integrated system.

The idea is that baseline risk factors – many of which are in the GP record – are recorded on the VTE risk assessment when patients are in the community. When patients come to hospital the assessment can be modified instead of starting from scratch. It should decrease duplication of work. "We're building our electronic links with general practice [and] if we can get those working we might be able to get an integrated system for other patients as well in the future," says Dr Everington.

Having a good team from across the hospital has been essential to VTE work at Salisbury. The main resource has been lead consultant time. Dr Everington estimates that she has devoted half a day to a day a week to VTE for the last two years. She forms part of a core steering group which also includes a lead nurse and lead pharmacist. Together they have brought other staff on board and ironed out policies. Each step in their VTE journey has led to a higher proportion of patients who have been risk assessed for VTE (see graph, above).

But they would have been lost without the support of previous chief executive Matthew Kershaw and current chief executive Peter Hill who regularly reinforce the message. Every time the chief executive reviews a department directorate, VTE is mentioned, which embeds it into the routine review process. Dr Everington says: "The chief executive does walk onto the ward and pick up a risk assessment and say 'isn't that supposed to be filled in' – nothing will get the ward sister moving more than that, it's powerful." ●