Health and Social Care Committee

Meeting Venue:
Committee Room 1 - Senedd

Meeting date:
24 May 2012

Meeting time:
09:00

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

For further information please contact:

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Agenda

1. Introductions, apologies and substitutions

2. One-day inquiry into venous thrombo-embolism prevention - Oral evidence (09:00 - 11:30) (Pages 1 - 33)

09:00 - 09:45

HSC(4)-15-12 paper 1 - Lifeblood
Dr Simon Noble
HSC(4)-15-12 paper 2 - UK Thromboprophyliaxis Forum
Dr Raza Alikhan

09:45 - 10:30

HSC(4)-15-12 paper 3 - Royal College of Obstetricians and Gynaecologists
Mr Nigel Davies
HSC(4)-15-12 paper 5 - RCN Wales
Lisa Turnbull, Policy & Public Affairs Adviser
Nicola Davies-Job, Acute Care & Leadership Adviser

10:30 - 10:40 Break

10:40 - 11:30

HSC(4)-15-12 paper 4 - Royal College of Physicians
Prof Beverly Hunt
HSC(4)-15-12 paper 19 - Welsh Orthopaedic Society
Dr Andrew Davies

3. Inquiry into Residential Care for older people - Feedback of engagement work to date (11:30 - 11:50) (Pages 34 - 49)

HSC(4)-15-12 paper 6 - Note of visit to Linc Care's Llys Enfys Development
HSC(4)-15-12 Paper 7- Note of visit to Hafod Care's Woodcroft Development
HSC(4)-15-12 paper 8 - Note of visit to Bethel House
HSC(4)-15-12 paper 9 - Note of reference group meeting 17 April 2012

4. Forward work Programme (11:50 - 12:00) (Pages 50 - 53)

HSC(4)-15-12 paper 10

12:00 - 13:00 Lunch

5. One-day inquiry into venous thrombo-embolism prevention - Oral evidence (13:00 - 15:15) (Pages 54 - 98)

13:00 - 13:45

HSC(4)-15-12 paper 11 - 1000 Lives + / Public Health Wales
Dr Alan Wilson

13:45 - 14:30

HSC(4)-15-12 paper 12 - Aneurin Bevan Health Board
Dr Grant Robinson, Medical Director
HSC(4)-15-12 paper 13 - Abertawe Bro Morgannwg University Health Board
Dr Bruce Ferguson, Medical Director
HSC(4)-15-12 paper 14 - Betsi Cadwaladr University Health Board
Dr Brian Tehan, Assistant Medical Director
HSC(4)-15-12 paper 15 - Cwm Tâf Health Board
HSC(4)-15-12 paper 16 - Cardiff and Vale University Health Board
HSC(4)-15-12 paper 17 - Hywel Dda Health Board

14:30 - 15:15

HSC(4)-15-12 paper 18 - Welsh Government
Dr Chris Jones, Medical Director, NHS Wales
Grant Duncan, Deputy Director, Quality Standards & Safety Improvement

6. Papers to note (Pages 99 - 101)

HSC(4)-13-12 minutes - Minutes of the meeting held on 2 May

7. Motion under Standing Order 17.42(vi) to resolve to exclude the public from the meeting for item 7 (15:15)

8. One-day inquiry into venous thrombo-embolism prevention - Consideration of evidence (15:15 - 15:30)

Health and Social Care Committee
HSC(4)-15-12 paper 1
One-day inquiry into venous thrombo-embolism prevention
- Evidence from Dr Simon Noble

LIFEBLOOD THE Thrombosis CHARITY

SUBMISSION TO THE NATIONAL ASSEMBLY FOR WALES HEALTH AND SOCIAL COMMITTEE INQUIRY INTO VENOUS THROMBOEMBOLISM PREVENTION IN WALES BY DR SIMON NOBLE

As Medical Director for Wales of Lifeblood: The Thrombosis Charity I am pleased to submit written evidence to the National Assembly for Wales' Health and Social Care Committee Inquiry into venous thromboembolism (VTE) prevention in Wales. I also present this evidence having chaired the All Wales Thrombosis Group, which developed the All Wales Risk Assessment Tools and as 1000 Lives Plus Faculty Lead for the Prevention of Hospital Acquired Thrombosis (HAT). I was also a member of the NICE Guideline Development Group for Clinical Guideline 92: Reducing the Risk of Venous Thromboembolism in Hospitalised Patients.

About VTE

VTE – blood clots – includes both deep vein thrombosis (DVT) and pulmonary embolism (PE). Blood clots form in the veins deep in the leg, usually in the calf or thigh, although occasionally DVT can occur in other veins of the body. A DVT may cause no symptoms at all or it may cause swelling, redness and pain. The majority of deaths from VTE are caused by part of the clot breaking off, travelling around the body and eventually blocking the pulmonary arteries (arteries in the lungs). This is known as a pulmonary embolism (PE). PE can occur suddenly, without warning, and of course can be fatal, though symptoms can include coughing (with blood stained phlegm), chest pain and breathlessness. Patients who survive their PEs are associated with long-term morbidities which can reduce quality of life. In addition up to 30% of people who have suffered a DVT will develop a chronic condition called Post Thrombotic Syndrome (PTS) requiring life long treatment.

Estimates of Hospital Acquired VTE in Wales

In 2005, England's Health Select Committee conducted a similar, one day Inquiry into the prevention of VTE in hospitalised patients[1]. Based on evidence submitted to the Inquiry, the report estimated that without risk assessment and prophylaxis 25,000 avoidable deaths occur every year across the UK. This figure was based on data published in the VITAE study

[1] Available here http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

which analysed healthcare databases and published research, across six EU countries[2]. From data across a total population of 618 million people, they identified 465,715 cases of DVT, 295,982 cases of PE and 370,012 VTE related deaths. Of these deaths, an estimated 27,473 (7%) were diagnosed as antemortem, 126,145 (34%) were sudden fatal PE and 217,394 (59%) followed undiagnosed PE. All most three quarters of deaths were from Hospital acquired VTE. In addition to these figures highlighting the scope of the problem, it is of interest to note that of all the VTE related deaths, only 7% were identified prior to death. If as these figures suggest, fatal PE is largely asymptomatic (34%) or undiagnosed by clinicians (59%) a strategy to prevent VTE related deaths should focus on their prevention. BAsed on this data, the number of preventable deaths due to hospital acquired thrombosis would be 1250 per annum if risk assessment and thromboprophylaxis were not carries out.

According to data from the Office of National Statistics, the number of deaths due to pulmonary embolus directly or where it is mentioned as an underlying cause are approximately 400 and 800 per annum respectively. However these figures are for all VTE related deaths and not just hospital acquired VTE. Based on Cohen's data where three quarters of all VTE deaths are hospital acquired one could calculate that there are over 300 deaths due to HAT and a further 600 associated with HAT.

Table 1: Number of deaths where deep vein thrombosis or pulmonary embolism was mentioned on the death certificate, Wales, 2006-2010

					Deaths (persons)
Cause of death	**2006**	**2007**	**2008**	**2009**	**2010**
Underlying cause	384	350	367	405	428
Mentioned as underlying or contributory cause	703	697	681	743	799

Even if one were to use these figures to suggest a HAT death rate of 900 per year, this is much lower than the 1250 suggested.
There are several reasons for this:

1. VTE is an under reported phenomenon since death due to VTE is a diagnosis that needs to be made by post mortem. Since Alder Hey, there has been reluctance to request and consent to post mortems and HAT related deaths are likely to be missed.

2. The ICD coding system for diseases does not specify hospital acquired thrombosis and there may be a coding bias which leads to an under reporting.

3. Death due to VTE can only be recorded on the death certificate and hence ONS data, if the cause of death is correctly identified and documented. If only 7% of deaths due to VTE are identified prior to death, it is likely that there is an under reporting of death due to VTE.

[2] Cohen AT et al. Venous thromboembolism (VTE) in Europe. The number of VTE events and associated morbidity and mortality. *Thromb Haemost.* 2007 Oct;98(4):756-64.

The Cost of Hospital Acquired VTE

The cost of Hospital Acquired VTE can be viewed in financial, physical and psychological terms. Lifeblood is contacted on a daily basis by people who have lost loved ones to thromboembolism and those whose lives have been changed by sustaining an thrombosis. It is impossible to quantify the psychological impact VTE has on patients and their families but in addition to recognising the financial cost of VTE we need to appreciate other ways this preventable condition can impact on lives.

Data presented to England's Health Select Committee in 2005 estimated that the hospital acquired VTE costs the NHS in England,Wales and Scotland £640 million per annum.

To view the cost of VTE within Wales one needs to recognise the cost of treating VTE.

The costs of treating DVT range from £499-£1941 depending upon complication and place of management.

The cost of treating a PE is £349-£3618 depending on the level of emergency and complications.

Assuming an incidence of VTE of 1 in 1000, this could lead to an estimated cost of between £1.04 – 1.85 million per annum.

In addition up to 30% of patients experiencing DVT will develop a chronic condition called Post Thrombotic Syndrome (PTS) which requires life long treatment at a current cost of £653 per annum.

Over the past five years there has been an increase in litigation regarding the prevention and diagnosis of VTE. Data from the NHS litigation authority in England shows that £25 million was paid to patients in 2005 and this figure rose to £26 million in 2010. It is estimated that the litigation costs for VTE will have totalled £250 million by 2015.

A cost modelling exercise by NICE calculated that implementing thromboprophylaxis is not only cost effective but also results in net cost savings to the NHS. For every 100,000 risk assessed and given appropriate prophylaxis, this would result in a saving of £12,000.
This figure does not take into account the cost of treating PTS or litigation costs.

About Lifeblood

Lifeblood is a UK based charity whose mission statement is to increase awareness of thrombosis among the public and health professionals, and to raise research funds to improve patient care through improved prevention and treatment of venous thromboembolic disease.

Alongside our active efforts to support research in thrombosis and raise awareness of the condition through our annual public awareness-raising campaign, National Thrombosis Week, we campaign vigorously for Governments across the UK to prioritise VTE prevention in the NHS ('Stop the Clots'), as well as more recently to improve the clinical diagnosis of VTE in the community ('Spot the Clots').

Lifeblood's 'Stop the Clots' campaign

Our ‘Stop the Clots’ campaign aims to ensure that every adult patient admitted to hospital across the UK receives a VTE risk assessment and appropriate prophylaxis in line with national clinical guidelines (SIGN Clinical Guideline 122 in Scotland, and NICE Clinical Guideline 92 in England, Wales and Northern Ireland). The campaign has always been outcomes-focussed. That is, ensuring patients’ risk of VTE, once admitted to hospital, is reduced by receiving appropriate prophylactic treatment if they have been identified as being at risk of VTE through their risk assessment; risk assessment for VTE alone is not enough to prevent hospital acquired VTE.

Lifeblood recognises that each country in the UK presents a different challenge for the national prioritisation of an outcomes-focussed approach to VTE prevention. Lifeblood is determined to continue campaigning vigorously to support each devolved nation implement its own approach to prioritising VTE prevention in a way that that suits their health system, which addresses their individual challenges, and builds on their individual strengths.

Submission

As Medical Director of Lifeblood Wales and Chair of the All-Wales Thrombosis Group (AWTG), I have promoted HAT prevention – Hospital Acquired Thrombosis (the preferred term in Wales) alongside the ‘1000 Lives Campaign’, a national patient safety initiative launched in 2008 aimed at avoiding 1000 avoidable deaths across NHS Wales. This campaign continues under the auspices of ‘1000 Lives Plus’ and Dr Noble remains Faculty Lead for prevention of HAT.

The 1000 Lives campaign comfortably achieved its aim of preventing 1000 avoidable deaths and continues to lead the patient safety agenda in Wales. Many of the successes of 1000 Lives and 1000 Lives plus are clearly evident with marked improvement in safer drugs management, reducing infection rates, pressure sores etc. It is to be congratulated for its achievements in improving patient care and the progress made in VTE prevention. However, the complexity of HAT prevention and the many challenges faced in implementing a sustainable HAT prevention programme means that the successes seen in other health improvement areas have not been realised to the same extent in HAT prevention.

The work of the 1000 Lives and 1000 Lives plus has taken HAT prevention to a point where with appropriate WG support and leadership, a standardised HAT prevention strategy and monitoring programme could be implemented with a system to demonstrate measurable patient benefit.

Lifeblood therefore views this Inquiry as a critical opportunity help shape the national agenda and drive the prioritisation of VTE prevention forward across Wales to ensure all patients receive appropriate prophylaxis when assessed as being at risk of VTE. We recognise that the Health Select Committee Inquiry in England from 2005 acted as a game-changer at the time and continues to be an authoritative source about the scale of avoidable VTE and the simple steps that can be taken to prevent it.

At the end of this submission, Lifeblood lists a number of calls for the Committee which we believe support national leadership on VTE prevention across Wales, with a call for a national focus on outcomes (that is, risk assessment and appropriate prophylaxis), supported by long-term, system-wide structures and approaches to achieve this.

The current status of HAT prevention in Wales

In April 2011 on behalf of the All Wales Thrombosis Group I wrote to the 7 Health Boards and 1 NHS Hospital Trust across Wales asking them to complete the VTE prevention

awareness survey under the provisions of the Freedom of Information Act. We enjoyed a 100% response rate, receiving completed responses from 7 Health Boards and 1 NHS Trust.

Given the impressive response rate, we are confident that we have presented a full account of the challenges faced, and the support required by organisations in implementing best practice guidance at that time. However, one must be mindful that this data reflects the state of play 12 months ago and the evidence submitted by the 7 Health Boards and 1 NHS Trust in Wales will give an up to date overview of progress.

The headline findings are listed below:

Awareness

- **100%** of Health Boards / NHS Trust responded (8 of 8).

- **88%** of organisations were aware of the Welsh Assembly Government's / 1000 Live-Plus monitoring tool for acute stroke (published in June 2010), which includes the requirement to risk assess patients for VTE / HAT?

- **100%** of organisations were aware of the NICE Guideline (published in Jan. 2010) on VTE prevention in patients admitted to hospital.

- **100%** of organisations were aware of the All-Wales Thrombosis Group / 1000 Lives-Plus HAT risk assessment tools, published in September 2010.

- **88%** of organisations had a formal written VTE prevention policy(s) or protocol in place.

Managing HAT Risk

- **100%** of organisations had in place multidisciplinary thrombosis committees, with involvement from doctors and nurses.

- **50%** of organisation's Board members were involved in HAT prevention and management through safety 'walk-rounds', the most common form of involvement.

HAT Risk Assessment

- **88%** of organisations undertook a documented risk assessment for VTE of all hospital inpatients.

- **75%** of organisations routinely reassessed patients for their risk of VTE.

Method and Audit

- **63%** of organisations regularly audited the uptake of risk-assessment for HAT and levels of prescribing of thromboprophylaxis.

- No organisations were able to provide data on the number of patients that were risk assessed for HAT on admission or the level of thromboprophylaxis administered from 2007 to 2009. Only one organisation was able to provide this data from 2009 to 2010.

Education and Information

- **38%** of organisations DID NOT offer patients any information on the risks of HAT on admission.

- **63%** of organisations DID NOT offer patients any information on the risks of HAT on discharge.

- **88%** of organisations DID NOT record instances of HAT on a registry.

Assistance Required

- **88%** of organisations are called for HAT risk assessment to be mandated by Government, with targets set for both documented risk assessment and thromboprophylaxis.

- **63%** of organisations called for mandatory education or training.

Two clear calls for government action emerged from the survey.

1. 88% of organisations called for the Welsh Assembly Government to take steps to **mandate VTE risk assessment**, with Intelligent Targets set for both documented risk assessment and thromboprophylaxis.
A system of national targets has been introduced successful in England through the Commissioning for Quality and Innovation (CQUIN) payment framework, following calls from clinicians themselves for national goals. The fact that clinicians in Wales are also calling for national VTE targets evidences further the significance of VTE prevention to patient safety.

2. Two-thirds of organisations called for the Government to **mandate VTE education and training**, stating it would increase consistent levels of VTE risk assessment and administration of thromboprophylaxis. Increasing professional awareness will be crucial to ensure Board-wide VTE policies are implemented at the ward level.

The challenges of preventing HAT

1. Complexity of HAT

Many of the health improvements bundles that have enjoyed success over the past few years have been in discreet areas of health care where there are clear points of assessment, intervention and evaluation. However, HAT prevention is more complex because:

i. Patients at risk of HAT will enter the healthcare system through different points of entry (elective surgery, emergency surgery, acute medicine, accident and emergency etc)
ii. Different specialties require different interventions; for example surgical patients will need pharmacological and mechanical prophylaxis whilst medical patients only require pharmacological. In addition, elective orthopaedic surgery has the option of using new oral agents to prevent VTE. In short, one size does not fit all.
iii. The risk of HAT may change as the patients condition changes.

As a result, the risk of practice becoming inconsistent across the Prinicipality is significant.

2. Challenges of buy in from all stakeholders

Whilst every health care profession will recognise the importance of handwashing to reduce hospital acquired infection, not everyone fully recognises the importance of HAT prevention. There are several reasons for this:

i. HAT may occur to ninety days after hospital discharge. Therefore the majority will present in the community and not to the hospital team that looked after the patient originally
ii. The majority of HATs will be managed as outpatients and the few that are readmitted to hospital are rarely looked after by their original team (HAT from a surgical procedure will be managed by physicians). Thus there is no formal way to feedback to professionals that their patient has developed HAT. As a result there is a perception amongst some clinician that HAT is not a major problem since they "never see it".
iii. There is concern within orthopaedic surgery in particular, that by using blood thinning medicines such as heparin or low molecular weight heparin (LMWH) to prevent HAT increases bleeding complications post operatively. The use of anticoagulants has been studies extensively and NICE concluded the side effects of using them are outweighed by the complications of not preventing HAT.

3. Patient empowerment

The success of the national hand washing campaign bears testament to the impact of patient empowerment and buy-in to a health improvement strategy. It is not uncommon for patients to challenge healthcare professionals who have no washed their hands; they have been encouraged to do so and the concept of infections being spread from patient to patient is easily understood. The concept of why HAT occurs is a more complex one to understand since there are many factors which puts someone at risk. Thus it is harder to explain to the public and for them to buy into the importance. In keeping with this, it is more challenging for the media to deliver a successful patient awareness campaign.

4. Prioritisation

Through working with colleagues involved in HAT prevention, there is a strong will to deliver a robust measurable HAT prevention strategy. However there is anecdotal evidence that unless HAT is recognised as priority by the Welsh Government, it is unlikely to have the dedicated attention it needs within each Health Board and Trust.

Data from Betsi Cadwalader University Health Board shows that there is a direct correlation between HAT risk assessment and HAT rates. Interestingly when the risk assessment rate drops off, there is a consequential rise in HAT rate.

Work in England has shown that when risk assessment is prioritised, the risk assessment rate has increased. However, within Wales we have an opportunity to better. Just because someone fills in a risk assessment form does not mean they will get appropriate thromboprophylaxis. Neither can one show in England that the increase in risk assessments has improved patients care. There is an opportunity in Wales to mandate risk assessment PLUS appropriate thromboprophylaxis and directly observe the impact on patient mortality/ morbidity through monitoring the HAT rate for each Health Board.

Further more a HAT rate would allow Health Boards to target patients who have experienced HAT and perform root cause analysis on each case, thereby allowing for learning and improvement.

Conclusion

I am grateful for the opportunity to provide evidence to the committee and would welcome any opportunity to participate in future work within the Principality aimesd at the prevention of HAT.

I respectfully request the Committee for the following in the published Report:

- To recognise the importance of preventing of avoidable hospital acquired VTE in Wales;

- To recognise the cost effective nature of preventing hospital acquired VTE, over and above managing VTE once diagnosed;

- To recognise the comprehensive and up to date nature of NICE Clinical Guideline 92 which sets out best practice in the risk assessment and prevention of hospital acquired VTE;

- To recommend that all adult patients, on admission to hospital, receive a risk assessment for VTE and appropriate prophylaxis in line with NICE Clinical Guideline 92;

- To recommend that the Welsh Assembly recognises VTE prevention as a priority for Welsh Health Boards;

- To recommend that the Welsh Assembly develops an outcomes-focussed approach to preventing VTE across Wales; by developing *Intelligent Targets* for Health Boards across Wales. These could include monthly sample data of a specified size, on both the percentage of adult patients who have received a risk assessment on admission to hospitals, **AND** the percentage of adult patients who have received the appropriate prophylaxis once they have been identified as being at risk

- To recommend that the Welsh Assembly requests all Health Boards and Trust provide an ongoing measure of their HAT rate

- To call on Health Boards to implement a robust system of root cause (RCA) of confirmed cases of hospital acquired VTE, to identify where mistakes have been made in leading to a preventable case of VTE; to recommend that HAT Steering Group shares systems for implementing RCA; and to urge that any learnings from cases of hospital acquired VTE which have been identified as preventable through the RCA are fed back to the responsible clinician and forwarded to the Health Board Medical Director.

- To recognise that professional awareness of hospital acquired VTE remains a challenge; and to recommend that steps are taken across Wales to improve education about preventing VTE amongst health professionals across the disciplines;

Dr Simon Noble
Medical Director (Wales), Lifeblood the Thrombosis Charity
Chair All Wales Thrombosis Group
Faculty Lead for HAT prevention1000 Lives and 1000 Lives Plus

SUBMISSION TO THE NATIONAL ASSEMBLY FOR WALES HEALTH AND SOCIAL COMMITTEE INQUIRY INTO VENOUS THROMBOEMBOLISM PREVENTION IN WALES

BY DR RAZA ALIKHAN: EXECUTIVE COMMITTEE MEMBER: UK THROMBOPROPHYLAXIS FORUM AND CONSULTANT HAEMATOLOGIST UNIVERSITY HOSPITAL OF WALES

As an executive committee member of the UK thromboprophylaxis forum I am pleased to submit written evidence to the National Assembly for Wales' Health and Social Care Committee Inquiry into venous thromboembolism (VTE) prevention in Wales.

The objectives of the UK Thromboprophylaxis Forum are:

- To provide a forum for UK healthcare professionals to meet and exchange views and information on thromboprophylaxis
- To facilitate best practice across the UK
- To identify solutions to problems with implementation of best practice
- To provide information on education initiatives such as thromboprophylaxis courses
- To provide the NHS Implementation Working Group (IWG) and NICE with a forum whereby they can interface with thrombosis committee members and others, thus helping them to achieve their objectives (e.g. development and implementation of the IWG's Risk Assessment Model, RAM)
- To promote local and national audit of thromboprophylaxis
- To raise public awareness of the need for thromboprophylaxis

Deep vein thrombosis (DVT), i.e. blood clots in the veins, and pulmonary embolism (PE), i.e. blood clots that have travelled to the lungs are distinct clinical presentations of the same pathophysiological process: venous thromboembolism (VTE). It is important to recognize that VTE is a significant cause of both morbidity and mortality in patients who have been hospitalized. It is estimated that hospital associated thrombosis (HAT) accounts for 25-50%

of all cases of VTE and that 5-10% of deaths in hospitalized patients occurs as a result of VTE.

Traditionally it was thought that it was patients admitted to hospital for surgery that were at risk of VTE. However, historically it has been known for centuries that pregnancy is associated with DVT and more recently it has become clear that medical patients make up the majority of those diagnosed with VTE.

The risk of VTE is related to the presence or absence of a number of risk factors (table 1) and the risk increases with the presence of increased numbers of risk factors.

Table 1. Risk factors for hospital associated thrombosis

Surgery	Pregnancy	Cancer
Cardiac failure	Respiratory failure	Acute infection
Previous VTE	Inherited thrombophilia	Hormone therapy
BMI > 30	Age > 60	Immobility

Chemical thromboprophylaxis, in particular heparin and low molecular weight heparin, has been shown to safely and effectively reduce the risk of both asymptomatic and symptomatic VTE in surgical and non-surgical patients. To appropriately prescribe thromboprophylaxis a patient must first be assessed for their risk of VTE (table 1).

One of the main recommendations of the Chief Medical Officer's Expert Working Group Report, in April 2007, was that all hospital patients should receive a VTE risk assessment upon admission to hospital. The All Wales Thrombosis Group in collaboration with 1000 Lives are to be commended for producing VTE risk assessment forms for acute medical, acute surgical, elective surgical, acute orthopaedic and elective orthopaedic admissions to hospital http://www.tpforum.co.uk/library/risk-assessment/. These risk assessment forms were produced in advance of the 2010 NICE clinical

guideline (CG92 VTE - reducing the risk) and were universally taken up and adapted by Health Boards across Wales.

Unfortunately, as witnessed in both England and Scotland following their introduction of VTE risk assessment, the use of these forms across Wales has been disappointing. There appears to be varying compliance across Health Boards as well as within individual hospitals, directorates, departments and individual clinicians. To address this issue, England made VTE risk assessment on admission to hospital a mandatory requirement. Scotland has recently also mandated VTE risk assessment on admission to hospital. Having led the way in VTE risk assessment Wales now finds itself following in the wake of both England and Scotland.

It is envisaged that VTE risk assessment and appropriate thromboprophylaxis will become part of the normal admission process, across Wales, associated with hospitalization of a patient. Raising awareness and in particular VTE education are of paramount importance. Since 2011, formal teaching on VTE has been established as part of Year 2 and Final Year medical undergraduate teaching at Cardiff University Medical School. Nursing staff are also central to VTE risk assessment and thromboprophylaxis to prevent HAT and it is therefore important to establish formal VTE teaching as part of the School of Nursing studies in Wales.

The establishment of VTE clinical nurse specialists to provide VTE leadership, promote VTE risk assessment and appropriate thromboprophylaxis, educate medical and nursing colleagues and contribute to audit of HAT are key to reducing HAT. There are a number of VTE nurse consultants as well as a significant number of VTE clinical nurse specialists in England contributing to achieving a reduction in HAT. There are currently no VTE nurse specialists in Wales.

The 1000 Lives campaign as well as the All Wales Thrombosis Group have led the way in Wales in raising the awareness of the scope of the problem as a result of VTE and HAT. Unfortunately, the initial momentum appears to have

faltered and Wales now finds itself falling further behind the progress being made in both England and Scotland.

The UK Thromboprophylaxis Forum would like the Committee to consider the following proposals:

Consider making VTE prevention a Tier 1 Core Delivery Target for NHS Wales, with:

1. Mandatory VTE risk assessment for all patients admitted to hospital in Wales
2. Inclusion of VTE education on the medical and nursing curriculum in Wales
3. Establishment of VTE clinical nurse specialists in each Health Board
4. Establishment of an All Wales HAT collaborative to define the HAT rate for the Principality and use this as a bench mark against which the success of risk assessment and thromboprophylaxis can be measured against

Health and Social Care Committee
HSC(4)-15-12 paper 3
One-day inquiry into venous thrombo-embolism prevention
– Evidence from Royal College of Obstetricians and Gynaecologists

Transforming Maternity Services Mini-Collaborative

Venous Thromboembolism (VTE)

Obstetric All Wales DVT Risk Assessment

Part of 1000 Lives Plus, the overall aim of the Transforming Maternity Services Mini-Collaborative is to improve the experience and outcomes for women, babies and their families within Maternity Services. One of the drivers in achieving this aim is to reduce the risk of venous thromboembolism in pregnancy.

Implementation of interventions relating to deep venous thrombosis (DVT) risk assessment should have been straight forward, because the Royal College of Obstetricians and Gynaecologists had published an evidenced based 'green-top guideline' on this subject. Although the guideline summarises the known increased risks of VTE in pregnancy, application of this knowledge to routine pregnancies creates an additional risk of increased morbidity and caesarean section. The level of the evidence has been queried in clinical practice, with the result that there was limited and inconsistent risk assessment taking place in maternity units in Wales.

The Transforming Maternity Services Mini-Collaborative brings together experts, clinicians and managers to effect change at the bedside (from the 'bottom up'). It is endorsed by Welsh Government, all Health Boards in Wales, and the Royal Colleges of Midwives (RCM), and Obstetricians and Gynaecologists (RCOG) in Wales.

The multi-disciplinary and inter-professional nature of the mini-collaborative has seen discussion by maternity staff in Wales with the aim of producing clarity in VTE risk assessment in pregnancy. Feedback from the service demonstrated consensus among clinical staff that the RCOG Green top guideline had several drawbacks, as it may be thought of as 'medicalising' women who would be otherwise regarded as normal. It recommends thromboprophylaxis with low molecular weight heparin (LMWH) for women with a BMI that would result in over 1:4 needing to inject themselves with LMWH during or after pregnancy, for an uncertain benefit, based on trial evidence that is of relatively low quality. There are no data on the clinical or cost-effectiveness of such a strategy.

Following consultation with experts from within Wales and the relevant endorsement committees, consensus has been reached to enable universal VTE risk assessment to be implemented throughout Wales, with two Exemplar DVT Risk Assessment Templates – one relating to the initial 'Booking' visit, which is to be included in the National Hand-Held records and one relating to Antenatal Admission and the puerperium (postnatal period). This has been a significant achievement for the mini-collaborative in a short period of time and is now allowing maternity units to proceed with implementation of the bundles.

All Health boards within Wales are currently implementing these risk assessments following localisation and agreement within their scrutiny committees.

It is recommended that DVT Risk Assessment be carried for pregnant women firstly at their booking appointment (ideally by 12 weeks pregnancy), at each antenatal admission and again following the birth.

Work is also underway to implement a combined antenatal booking and admission risk assessment within gynaecological wards alongside the general DVT risk assessment.

Below are the agreed risk assessments:

Deep Vein Thrombosis Risk Assessment
Booking

All women to be assessed by midwife at first/booking appointment.

Indications for consideration of antenatal thromboprophylaxis

	YES	NO		YES	NO
Previous DVT/PE			**Antithrombin deficiency**		
Systemic lupus erythematosis			**Sickle cell disease**		
Antiphospholipid syndrome			**Myeloproliferative disorder**		
BMI ≥45kg/m^2 **Consider referral to anaesthetist as per local guidance**			**Assessed by** **Date / Signature**		

If one or more Indications (above) present, woman to be referred for obstetric led care and *consideration* of antenatal thromboprophylaxis.

Referred o (if appropriate): **Date:**

Please refer to local guidance re referral timeframes and follow-up.

Obstetrician Review SUMMARY:

Reviewed by: **Date:**

This assessment needs to form part of any further risk assessment following identification of risk factors (and referral) or during any AN hospital admission.

ANTENATAL ADMISSION/POSTNATAL DVT RISK ASSESSMENT

Every woman to be risk assessed at each antenatal admission by locally agreed clinician.
Please refer to Antenatal Booking Risk Assessment (to ensure continuation) prior to completion of this form.
Every woman to be re-assessed postnatally

Addressograph

ANTENATAL ADMISSION

Indications for thromboprophylaxis (TEDS & Clexane) whilst antenatal inpatient.
Indication : One identified indication = Thromboprophylaxis to be considered

Date										
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Ongoing antenatal thromboprophylaxis										
Hyperemesis										
Dehydration with dry tongue / poor urine output										
Booking BMI ≥35kg/m^2										
Varicose veins with phlebitis										
Immobility >3 days bed rest conditions										
Significant medical co-morbidity (such as heart disease, metabolic, endocrine or respiratory pathologies, acute infectious diseases or inflammatory)										
Sepsis										
Active cancer / cancer treatment										
Thromboprophylaxis required										
Booking Weight		**Weight at risk assessment.**								
Signature										

Prescription of Thromboprophylaxis:

Prescribe according to booking weight unless there has been a significant weight gain during the pregnancy of >12kg

Weight (kg)	**Enoxaparin dose (mg)**	**frequency**
<50	20	od
50-100	40	od
101-120	40	bd
>120	60	bd

Contraindications to Enoxaparin (CLEXANE)

1. Birth or spinal or epidural analgesia / anaesthesia anticipated within next 12 hours	5. DIC
2. Wait 6 hours following performing spinal or epidural analgesia / anaesthesia or epidural catheter removal	6. Past history of heparin-induced thrombocytopenia (discuss with haematologist)
3. Do not remove epidural catheter within 12 hours of Clexane administration. (If on > 40mg discuss with anaesthetist)	7. Patient is already receiving other anticoagulants (e.g. warfarin/heparin)
3. Active bleeding	8. Severe liver disease
4. Platelet count < 75 x 10^9/l	9. Severe renal impairment: If eGFR < 30ml/min or evidence of acute renal failure use subcutaneous unfractionated heparin 5000u bd

Consider below knee antiembolism stockings alone if enoxaparin is contraindicated and thromboprophylaxis needed. Avoid stocking if pedal pulses are impalpable, peripheral vascular disease, severe dermatitis, peripheral neuropathy or recent skin graft.

Postnatal (to be completed within locally agreed timeframe)

Ensure thromboprophylaxis (TEDS & Clexane for 5 days) has been prescribed following birth with one or more factor	**Yes**	**No**	**Women receiving thromboprophylaxis during pregnancy should continue treatment for 6 weeks postpartum**
PPH ≥1500ml			
Red blood cell transfusion or transfusion of coagulation factors			
Caesarean section (elective or emergency)			
Still-birth			
BMI >40kg/m^2			**Signature**
Sepsis			
Complex vaginal delivery (Consider thromboprophylaxis)			
Thromboprophylaxis required			**Date**

Delay commencement until 6 hours following epidural catheter removal or completion of spinal anaesthesia. Encourage early mobilisation, hydration and awareness of symptoms of VTE in all women.
Prescription of postnatal Thromboprophylaxis: As table above. To be calculated using booking weight.

Royal College of Physicians

National Assembly for Wales Health and Social Care Committee: Inquiry into Venous Thromboembolism prevention in Wales

Royal College of Physicians' submission

4 May 2012

1. The Royal College of Physicians (RCP) is pleased to submit written evidence to the National Assembly for Wales' Health and Social Care Committee Inquiry into Venous Thromboembolism (VTE) prevention in Wales.

Introduction

About VTE

2. VTE – blood clots – manifests as both deep vein thrombosis (DVT) and pulmonary embolism (PE). Blood clots form in the veins deep in the leg, usually in the calf or thigh, although occasionally DVT can occur in other veins of the body. A DVT may cause no symptoms at all or may cause swelling, redness and pain.

3. The majority of deaths from VTE are caused by part of the clot breaking off, travelling around the body and eventually blocking the pulmonary arteries (arteries in the lungs). This is known as a pulmonary embolism (PE). PE can occur suddenly and without warning, though symptoms can include coughing (with blood-stained phlegm), chest pain and breathlessness. PE can be fatal.

4. Patients who survive a PE may develop long-term comorbidities, including post-thrombotic syndrome, which consists of chronic swelling and ulceration of the legs. This can significantly impact quality of life.

Estimates of hospital-acquired VTE in Wales

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5. In 2005, the House of Commons Health Select Committee in England conducted a similar, one day Inquiry into the prevention of VTE in hospitalised patients[1]. The subsequent report estimated that 25,000 avoidable deaths occur every year in the UK from hospital-acquired VTE.

6. While there has been some debate in recent years over the accuracy of the 25,000 avoidable deaths figure[2], it is widely agreed that many thousands of deaths occur every year from preventable VTE acquired in hospitals across the UK. Work in England is ongoing to develop up-to-date and accurate statistics about incidence and death from hospital-acquired VTE, though this task entails significant difficulty due to the often clinically silent nature of VTE, and a fall in the number of postmortems in recent years.

Preventing hospital-acquired VTE

7. It is a well-established clinical fact that hospital-acquired VTE can be prevented through a combination of two simple, safe and effective steps: a risk assessment of patients for their VTE and bleeding risk, to identify those at risk of VTE and those for whom preventative treatment is appropriate; and administering preventative treatment for those identified as being at risk of VTE, in the form of pharmacological prophylaxis and / or mechanical prophylaxis.

8. NICE clinical guideline 92, published in January 2010, provides a comprehensive and up to date set of best practice recommendations for VTE prevention applicable across England and Wales. The guideline makes recommendations on assessing and reducing the risk of VTE in patients in hospital, and offers guidance on the most clinically and cost-effective measures for VTE prophylaxis in these patients. The recommendations take into account the potential risks of the various options for prophylaxis and patient preferences[3].

9. VTE prevention, in line with the recommendations contained within NICE clinical guideline 92, is therefore a simple, safe and effective measure which can prevent thousands of avoidable deaths from hospital-acquired VTE every year.

Financial cost of hospital-acquired VTE

10. VTE prevention is undoubtedly a cost effective measure for health boards in Wales to implement. NICE has demonstrated that compliance with NICE clinical guideline 92 to prevent hospital-acquired VTE saves money, over and above the cost of managing VTE once it has developed.

11. Following the publication of NICE clinical guideline 92, NICE placed VTE prevention within its list of top ten cost effective guidelines. NICE estimated that effective VTE prevention would cost the NHS in the UK an additional £21.9 million nationally – but this figure is more than offset by the anticipated reductions in DVT and PE, estimated to save £26.3 million nationally. The costing template published alongside the guidance suggested that, for a population of 100,000, the NHS could expect to generate savings of £11,000.

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[1] Available at http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

[2] BMJ article and responses available at http://www.bmj.com/content/343/bmj.d6452

[3] P5 http://www.nice.org.uk/nicemedia/live/12695/47195/47195.pdf

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12. In contrast, statistics published by The Office for Healthcare Economics in 1993 estimated that the annual cost of treating patients who developed post-surgical DVT and PE was in the region of £204.7 to £222.8 million in the UK. The total cost (direct and indirect) to the UK of managing VTE is estimated at £640 million (House of Commons Health Select Committee, 2005)[4].

13. These figures clearly demonstrate that compliance with best practice in VTE prevention (that is, risk assessment of patients for VTE on admission and the administration of appropriate prophylaxis) makes financial sense for health boards in Wales at a time when there are significant pressures to manage costs. VTE prevention is a simple, effective, and cost-efficient measure to save lives.

Submission

Building on NHS Wales successes and continuing to improve VTE prevention

14. The medical director of Lifeblood Wales and Chair of the All-Wales Thrombosis Group (AWTG), Dr Simon Noble, has promoted HAT prevention – hospital-acquired thrombosis (the preferred term in Wales) alongside the '1000 Lives Campaign', a national patient safety initiative launched in 2008 aimed at avoiding 1000 avoidable deaths across NHS Wales. This campaign continues under the auspices of '1000 Lives Plus' and Dr Noble remains faculty lead for prevention of HAT.

15. The 1000 Lives campaign achieved its aim of preventing 1000 avoidable deaths and continues to lead the patient safety agenda in Wales. Many of the successes of 1000 Lives and 1000 Lives Plus are clearly evident with marked improvements in safer drugs management, reducing infection rates, pressure sores etc. However, the complexity of HAT prevention and the many challenges faced in implementing a sustainable HAT prevention programme means that the successes seen in other health improvement areas are not as evident in HAT prevention.

16. The work of 1000 Lives and 1000 Lives Plus has taken HAT prevention to a point where, with appropriate Welsh assembly members' and Welsh government support and leadership, a standardised HAT prevention strategy and monitoring programme could be implemented with a system to demonstrate measurable patient benefit.

17. The RCP therefore views this Inquiry as a critical opportunity to help shape the national agenda and drive the prioritisation of VTE prevention forward across Wales to ensure all patients receive appropriate prophylaxis when assessed as being at risk of VTE. We recognise that the Health Select Committee Inquiry in England from 2005 acted as a game-changer at the time and continues to be an authoritative source about the scale of avoidable VTE and the simple steps that can be taken to prevent it.

18. The majority of this submission will focus on broad examples of practice we have learnt from other national approaches to VTE prevention – what has worked well, what we believe falls short in developing an outcomes-focused national approach to VTE prevention, and the opportunity presented by this Inquiry for the Committee to support a robust, comprehensive and national approach to VTE prevention across Wales.

[4] Cited from NICE Clinical Guideline 92 Costing Template, available at http://www.nice.org.uk/nicemedia/live/12695/47234/47234.pdf

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19. In the final part of this submission, we list a number of recommendations for the Committee to consider. We believe these steps will support national leadership on VTE prevention across Wales by highlighting the need for a national focus on outcomes (that is, risk assessment and appropriate prophylaxis), supported by long-term, system-wide structures and approaches to achieve this.

Implementation of NICE clinical guideline 92 in Wales

20. We defer to the submission from the All-Wales Thrombosis Group for evidence on this matter.

Implementation of the 1000 Lives Plus risk assessment tool in Wales

21. We defer to the submission from the All-Wales Thrombosis Group for evidence on this matter.

The adequacy and effectiveness of the 1000 Lives Plus risk assessment tool in preventing venous thromboembolism in hospitalised patients; problems in the implementation and delivery of VTE prevention actions; the effectiveness and utilisation of pharmacological and mechanical prophylaxis for VTE

22. We commend the 1000 Lives Plus team for working with the All-Wales Thrombosis Group to develop robust and comprehensive sets of VTE risk assessment and prophylaxis tools during 2010, and further for supporting health boards to implement these tools locally in the form of the HAT Collaborative last year. The forms are certainly adequate in that they comply with NICE clinical guideline 92, and they provide guidance on both risk assessment ***and*** appropriate prophylaxis for at risk patients. In this respect, the template tools go further than the national VTE risk assessment tool published by the Department of Health in England[5], which, although compliant with NICE clinical guideline 92 in the risk factors for VTE and bleeding for the purposes of risk assessment, do not include guidance on appropriate prophylaxis. The RCP therefore commends the 1000 Lives Plus tools as an adequate template to implement VTE prevention in line with existing, national best practice, at the local level.

23. However, we note that the effectiveness of such tools in practice is limited by their uptake at the ward level. This is turn is driven by, amongst other things, the degree to which health boards require, as part of a local VTE prevention policy, that all patients admitted to hospital receive a VTE risk assessment, and are administered appropriate prophylaxis. Unless health boards stipulate this requirement for every patient admitted to hospital in their local VTE policy – and audit compliance in accordance with this – there is no demand or driver to implement the tools at a local level. In addition, limited professional and commissioner awareness about the scale of hospital-acquired VTE limits the individual responsibility taken by health care professionals to ensure VTE risk assessments are completed.

24. As stated above, we have deferred to the All-Wales Thrombosis Group for evidence about the uptake of the tools at the local level. However, based on experience from England on how the uptake of the national VTE risk assessment tool published by the Department of Health has

[5] Available at http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_113355.pdf

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been driven, we strongly believe that the national prioritisation of VTE prevention across NHS Wales is essential if we are to ensure that health boards demand, in local VTE prevention policies, that all patients admitted to hospital have a VTE risk assessment and prophylaxis form completed in line with NICE clinical guideline 92. This must be complemented by the requirement that health boards provide regular audit results to the Welsh government on the percentage of patients who have been risk assessed using the tools, and who have received appropriate prophylaxis treatment. This approach will not only recognise the scale of hospital-acquired VTE and the ease and cost-effectiveness with which it can be prevented across NHS Wales, it will also drive the effective use of the national tools at the local level.

25. Such a national approach has been successful in improving the uptake of the national VTE risk assessment tool in England. VTE prevention has been named a national clinical priority across England since 2010. In the same year, the national commissioning for quality and innovation (CQUIN) scheme was introduced in England. This scheme requires each trust to provide monthly census data to the Department of Health on the percentage of patients who have been risk assessed for VTE; if trusts can demonstrate they has risk assessed 90% of adult admissions for VTE in a month, they receive a financial payment. National prioritisation, coupled with national reporting requirements, has been instrumental in improving risk assessment rates, as we have seen a rise in the percentage of NHS patients risk assessed for VTE on admission climb from under 40% to over 90% in under two years.

26. However, the English approach has been viewed as burdensome by some, due to requirement to report monthly census rather than sample data of patients who have been risk assessed for VTE. In addition, and more importantly, the English approach sees the requirement to report monthly audits of prophylaxis rates left to the local level – there is no national goal for prophylaxis rates supported by a national audit requirement. As such, evidence collected from the All-Party Parliamentary Thrombosis Group during their annual audits of NHS trusts demonstrates that the ongoing, national improvements in VTE risk assessment rates delivered through the national CQUIN goal have not been reflected in improved prophylaxis rates[6]. This is worrying given the fact that the administration of prophylaxis is crucial to preventing hospital-acquired VTE – risk assessment alone is not enough.

27. The RCP therefore emphasises to the Committee that the effective uptake of the 1000 Lives Plus risk assessment tool – focussing on both risk assessment and prophylaxis – must be supported with a national, outcomes-focussed approach to VTE prevention which not only makes risk assessment and prophylaxis compulsory, it also measures health boards' compliance with these requirements.

28. The RCP submits that that Committee should recommend that the Welsh government recognises VTE prevention as a priority for Welsh health boards. We submit that the Committee should recommend that the Welsh government develops an outcomes-focussed approach to preventing VTE across Wales; that the Committee should recognise the impact that the national prioritisation and reporting scheme has had in England in improving risk assessment rates of VTE; and should recommend that the Welsh government adopts its own national approach to VTE prevention. We recommend this go further than England's approach by developing *intelligent targets* for health boards across Wales to provide monthly sample data of a specified size, on both the percentage of adult patients who have received a risk

[6] Available at http://apptg.org.uk/?page_id=58

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assessment on admission to hospital, ***and*** the percentage of adult patients who have received the appropriate prophylaxis once they have been identified as being at risk.

Additional observations to improve the prevention of hospital-acquired VTE across NHS Wales

29. The RCP observes that, in general, professional and commissioner awareness about the scale of hospital-acquired VTE is poor. This limits the individual responsibility taken by health care professionals to ensure VTE risk assessments are completed and prophylaxis administered, even if health board policy stipulates that the forms must be completed. We submit that the Committee recommends that steps are taken across Wales to improve education about preventing VTE amongst health professionals across the disciplines, and to ensure VTE prevention is viewed as an essential standard of quality care.

30. The RCP notes that the Hospital-Acquired Thrombosis (HAT) Steering Group, chaired by Dr Simon Noble, and consisting of the Chairs of Thrombosis Committees from the Health Boards, exists to share practice and experience in preventing VTE at the local level across health boards in Wales. We submit that this Group should be supported to continue its work in supporting health care professionals implement high quality VTE prevention at the local level.

31. The RCP recognises the utility of root cause analysis in learning from mistakes and changing behaviour. While time-consuming, root cause analysis of confirmed cases of hospital-acquired VTE can ensure that hospitals and health boards can identify gaps in practice which can be addressed in order to reduce the incidence of hospital-acquired VTE in future. We therefore submit that the Committee should call on health boards to implement a robust system of root cause analysis (RCA) of confirmed cases of hospital-acquired VTE, to identify where mistakes have been made in leading to a preventable case of VTE; should recommend that the HAT Steering Group shares systems for implementing RCA; and should urge that any learnings from cases of hospital-acquired VTE which have been identified as preventable through RCA are fed back to the responsible clinician and forwarded to the health board medical director. Taken in its entirety, this system of an effective RCA can support an improvement in practice to help prevent of hospital-acquired VTE.

Lifeblood and the RCP's call for the Committee

32. Further to the evidence included within this submission, the RCP calls on the Committee:

    a. To recognise the unacceptably high incidence and death rate of avoidable hospital-acquired VTE in Wales;

    b. To recognise the cost effective nature of preventing hospital-acquired VTE, over and above managing VTE once diagnosed;

    c. To recognise the comprehensive and up-to-date nature of NICE clinical guideline 92 which sets out best practice in the risk assessment and prevention of hospital-acquired VTE;

    d. To recommend that all adult patients, on admission to hospital, receive a risk assessment for VTE **and** appropriate prophylaxis in line with NICE clinical guideline 92;

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e. To recommend that the Welsh government recognises VTE prevention as a priority for Welsh health boards;

f. To recommend that the Welsh government develops an outcomes-focused approach to preventing VTE across Wales; to recognise the impact that the national prioritisation and reporting scheme has had in England in improving risk assessment rates of VTE; to recommend that the Welsh government adopts its own national approach to VTE prevention which goes further than England's approach, by developing *intelligent targets* for health boards across Wales to provide monthly sample data of a specified size, on both the percentage of adult patients who have received a risk assessment on admission to hospitals, **and** the percentage of adult patients who have received the appropriate prophylaxis once they have been identified as being at risk;

g. To recognise that professional awareness of hospital-acquired VTE remains a challenge; and to recommend that steps are taken across Wales to improve education about preventing VTE amongst health professionals across the disciplines;

h. To recognise the ongoing clinical leadership provided by the HAT Steering Group, chaired by Dr Simon Noble, which exists to share practice and experience in preventing VTE at the local level across Health Boards in Wales;

i. To call on health boards to implement a robust system of root cause analysis (RCA) of confirmed cases of hospital-acquired VTE, to identify where mistakes have been made in leading to a preventable case of VTE; to recommend that the HAT Steering Group shares systems for implementing RCA; and to urge that any learnings from cases of hospital-acquired VTE which have been identified as preventable through RCA are fed back to the responsible clinician and forwarded to the health board medical director.

33. The RCP would be more than happy to provide more evidence for the Committee on the matter in writing or verbally during the oral evidence session on 24 May where required.

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Health and Social Care Committee
HSC(4)-15-12 paper 5
One-day inquiry into venous thrombo-embolism prevention
– Evidence from RCN Wales

National Assembly for Wales Health and Social Care Committee Inquiry into venous thrombo-embolism prevention in hospitalised patients in Wales: Submission from the Royal College of Nursing in Wales

The 1000 Lives Plus risk assessment tool – the need for national and LHB level monitoring of uptake and performance management

The development of the 1000 Lives Plus risk assessment tool in Wales was a tremendous achievement and justly celebrated. The risk assessment tool was based upon a systematic review, meta analysis and health economic appraisal undertaken by the NICE which was published in Guideline 92: Reducing the Risk of Venous Thromboembolism in Hospitalised Patients.

Unfortunately since its initial launch in 2010 the VTE programme has now a low key maintenance approach. The assessment tool is being used inconsistently across Wales. Some areas are using the tool and many are not. It is important to note that this poor uptake is inconsistent within Local Health Boards and indeed is inconsistent within hospitals.

There does not appear to be any national level monitoring for the use of this assessment tool or incentive for the Local Health Boards to comply with its use.

In England the National Commissioning for Quality and Innovation (CQUIN) department has made huge impact on the rates of hospital acquired thrombosis. CQUIN acted as a lever for driving the implementation of VTE risk assessments by providing financial incentives for organisations to collect 'census' data on all hospitalised patients to demonstrate that they were achieving a target of 90%.

The financial case for this approach was the amount of money paid out was more than compensated for by the financial savings achieved from reducing the number of compensation pay-outs to patients and their families for the incidence of unnecessary VTE. Data from the NHS Ligation authority shows that in 2005 England paid out £21million to patients who experienced avoidable VTE or had the diagnosis missed by doctors, but this rose to more than £26 million in 2010.

A similar financial assessment of the savings in Wales should be made and we would advise the Committee to make enquires of the compensation paid out in Wales.

There is also a need for monitoring of uptake of the risk assessment at a LHB level. We are aware that most, if not all, LHBs have a thrombosis committee but the role and remit of these committees is not clear to our members.

Some Local Health Boards have employed a specialist nurse (often as a part-time aspect of their role) to monitor and promote the uptake of the risk assessment tool and preventative actions. For example a specialist nurse is employed in ABMU LHB and a data analyst (a nurse by background) in Betsi Cadwaladr. A specialist nurse is also employed specifically for Glan Clwyd Hospital but funded by a pharmaceutical company – the funding of which is coming to an end. These nurses are crucial to provide education to healthcare support workers, junior doctors and nurses on the subject.

This approach is clearly inconsistent across Wales. It would make sense to consider the evidence from these posts – including the financial cost-benefit analysis. If the impact of uptake and education can clearly be seen to improve and the rate of VTE reduced the wisdom of securing the future of these posts is clear.

Providing data on the relationship between actions taken and outcome is not something purely of interest to management, where ward staff can clearly see the beneficial outcomes of their work, and its value to the patient and organisation, motivation and participation is high.

Pharmacological and mechanical prophylaxis for VTE

The RCN is aware of a small-scale pilot in the Princess of Wales hospital to develop a high visibility sticker for the drug chart of hospital patients assessed at a high risk of VTE. This pilot scheme is multi-professional in approach with doctors, nurse and pharmacists involved.

Thrombo prophylaxis stockings are ordered to each clinical area in the NHS via the All Wales procurement contract. The selection of the various sizes is good but training on stocking application is patchy and delivered by the contacted company. We would advise that the Committee make enquires as to how this training is funded and delivered e.g. is the company required to deliver this as part of its contract? Who in the LHB can access it? It is worth noting that most LHB have placed a moratorium on nursing staff attending any form of training because they are reluctant to finance the backfill to the posts needed on the ward for even a an hour or so.

Demonstration of Hospital Acquired Thrombosis (HAT) Rate

The incidence of HAT and number of deaths attributable to it are based on large scale European Epidemiological studies. However, the HAT rate for Wales is neither known nor recorded. If each Health Board were required to demonstrate its HAT rate, this would bring several benefits in ensuring safe and standard practice. Firstly, it would provide an accurate picture of the scope of the problem within Wales. Secondly, it would allow Health Boards to identify the key problem areas that need improving. Finally, demonstrating the HAT rate will allow professionals to target cases upon which root cause analysis needs to occur, thus allowing for learning and healthcare improvement for each Health Board

Additional points of interest

Hospitalisation or hospital admission which resulted in a period of lesser mobility may increase the risk of VTE to a patient. However they may develop the condition of symptoms in the community. A GP may then refer the patient for an ultrasound scan. It would be very useful therefore to assign a specific radiology code for this type of referral to better understand the frequency of incident.

The RCN would also recommend consideration of the benefits of a national public awareness campaign on the ways to reduce risk of VTE and promote health following hospital admission. NICE guidelines recommend that patients are given both verbal and written information on discharge from hospital. NICE also recommend re assessment within 24 hours of admission and whenever the clinical situation changes.

VTE risk assessments for expectant mothers are carried out by midwives. The risk assessment implementation has been led successfully by the 1000 lives+ Maternity Collaborative and this initiative is to be strongly welcomed.

Summary of recommended actions

- monitoring and performance management of VTE assessment in hospital at a national and LHB level and development of this model to monitor prevention activity
- consideration of the use of specific posts to champion VTE risk assessment, education and prevention activity including cost-effectiveness
- standardised reporting of positive scans for VTE to enable data capture
- publication of national HAT rate for Wales, mandatory recoding of HAT rate with root cause analysis for all cases of HAT
- primary care referrals for ultrasound scan for suspected VTE to be specifically coded to enable data analysis
- consideration of the benefits of a national public awareness campaign on the ways to reduce risk of VTE and promote health following hospital admission

Welsh Assembly Health and Social Care Committee one-day inquiry: Venous Thromboembolism prevention in hospitalised patients in Wales

Submission from the Welsh Orthopaedic Society

There are two groups of patients under Orthopaedic care; those who have suffered a traumatic injury admitted for the management of bone and soft tissue damage, and those admitted for elective Orthopaedic surgery such as joint replacement.

Venous Thrombosis happens when there is an imbalance in the normal homeostatic mechanisms as a result of blood flow stasis, vessel wall damage and / or activation of the clotting cascade of the patient as a result of injury, surgery or systemic disease.

The incidence of symptomatic Pulmonary Embolus has been shown to be very low in recent series of major elective joint replacement patients[1,2,3]. The incidence of fatal pulmonary embolus is of the order of 0.07%[1] using aspirin as thromboprophylaxis.

Historical data regarding rates of DVT in Orthopaedic patients are of limited applicability to current practice as peri-operative protocols have changed dramatically with regard to early mobilisation of patients following hip and knee replacement, care with maintaining hydration and use of mechanical calf pumps intra-operatively.

Published rates of DVT in Orthopaedic patients are often based on soft end-points such as venographically or ultrasound detected thrombosis in patients who have no symptoms. Patients who have an asymptomatic DVT may not have any long term adverse consequences as patients who underwent major joint replacement in the 1980s and early 1990s (when prolonged bed rest was common) do not have higher rates of venous ulceration in later life than the population averages[4,5]. The significance of a diagnosis of asymptomatic DVT is unknown and treatment in this situation may be unnecessary and potentially even harmful.

Trauma patients have two contradictory conditions with regard to thrombo-embolism as they are often immobilised resulting in blood flow stasis and risk of clot formation but they also have an injury which will predispose to bleeding from damaged soft tissues and broken bones.

In the immediate post-operative period all Orthopaedic and Trauma patients have surgical wounds which can bleed. This can result either in external blood loss requiring replacement or more likely

internal bleeding that can result in haematoma formation. In a number of these patients, deep infection will result with the potential for the loss of implanted metal-work such as fracture fixation or joint replacement prostheses. This will result in poor outcomes for the patient and in extreme cases, loss of the limb itself. The use of drugs that discourage blood clotting in favour of bleeding may therefore have serious unintended consequences for patients suffering such complications. The risk of amputation, loss of soft tissue coverage and loss of the implant is ten times higher for patients who return to theatre with wound problems post-operatively than for those who do not[6]. In addition to the human cost, the cost to the health service of revision surgery for infection is of the order of £30,000 per patient.

There have been a number of guidelines published regarding thromboprophylaxis regimens in Orthopaedic patients, some with conflicting advice. Aspirin has not been recommended for use by many of these documents however analysis of the National Joint Replacement Registry data indicates no difference in outcomes for arthroplasty patients treated with Low Molecular Weight Heparin injections or Aspirin[7,8]. Many guidelines have advocated the routine use of new chemical thromboprophylaxis agents that do not have a long track record in clinical practice.

There have been several clinical studies from both the UK and North America that have shown that adopting a blanket policy of offering all elective arthroplasty patients chemical thromboprophylaxis has resulted in more complications and poorer outcomes for patients than previous regimens that did not include the routine use of such drugs[7,9].

There are a number of new chemical agents available for thromboprophylaxis that report low rates of 'major bleeding' in the published summaries of clinical trials using those drugs. However these trial summaries do not highlight a much larger group of bleeding complications that are termed 'clinically significant non-major bleeds'. These events are reported in small print in the tabulated results sections of those papers [eg10,11]. It is these events that can seriously jeopardise the results of surgery as detailed above.

A small proportion of patients are at increased risk of developing venous thrombosis when compared to the rest of the general population. Many are identifiable in advance of surgery on account of thrombophilia diagnoses such as previous personal or family history of Venous Thromboembolism, Protein S or Protein C deficiency, Factor V Leiden, Antiphospholipid Antibodies etc. Such patients will almost certainly need some form of chemical thromboprophylaxis in addition to the mechanical methods employed for 'standard risk' patients.

Key to the successful management of risk of Thromboembolism in Trauma and Orthopaedic patients is a personal assessment of each patient on admission and a tailored regimen of mechanical and / or chemical thromboprophylaxis. It is important that the risk of DVT be reduced without increasing the risks of poor surgical outcomes as a result of complications caused by the prophylaxis regimen. To this end, latest advice from the American Academy of Orthopaedic Surgeons recommends mechanical and / or chemical thromboprophylaxis[12,13].

The Welsh Orthopaedic Society believes that it is imperative that each patient is assessed pre-operatively for their individual risk of venous thrombosis versus bleeding. These risks together with

the options available for prophylaxis should be discussed with the patient. A decision should then be made on the appropriate thromboprophylaxis regimen. This decision should be based on the balance of benefit versus risk for each individual patient. Once the decision is made it should be recorded in the patient record. We would submit that for 'standard risk' patients that regimen would be based on maintaining hydration, mechanical devices and early mobilisation. Some patients may undoubtedly benefit from additional chemical agents and this should be determined after their individual assessment takes place.

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Health and Social Care Committee
HSC(4)-15-12 paper 6
Inquiry into Residential Care for older people – Feedback of engagement work to date – Note of visit to Linc Care's Llys Enfys Development

HEALTH AND SOCIAL CARE COMMITTEE – VISIT TO LINC CARE'S LLYS ENFYS DEVELOPMENT (26 APRIL 2012)

Background

1. As part of the inquiry into residential care for older people, members of the Health and Social Care Committee visited Linc Care's Llys Enfys development in Llanishen, Cardiff (26 April 2012).

2. During the visit Committee members met staff representatives of Llys Enfys and Linc Cymru. The purpose of the visit was to:

    - view – and learn more about – the independent living model adopted at Llys Enfys; and

    - learn more about the mix of services provided via Llys Enfys's integrated housing approach, including personal care and support, sheltered housing for older people, and specialist accommodation and support for people with dementia and young disabled adults.

3. The facility at Llys Enfys has been operational since 2012. During the course of the visit, Members met a number of current residents.

4. This paper summarises the key points raised during the Committee's visit.

About the Llys Enfys development

Independent living and the mix of services

5. Linc Cymru representatives explained to Members that the Llys Enfys independent living scheme enables older people to **live safely and independently in their own homes**, while benefiting from packages of onsite personal care and support. All care and support packages can be adjusted according to the changing needs of residents and can be delivered to them in their own homes.

6. The Committee was told that the scheme comprises 102 **self-contained flats**, with a mix of 1 and predominantly 2-bedroom accommodation. 124 residents currently reside at Llys Enfys, 60% in single-occupancy and the remaining 40% as double occupants. Llys Enfys staff told the Committee that a conscious decision was made to provide more 2-bedroom than 1-bedroom flats to ensure that

family can visit and stay, and to remain flexible to future demographic changes (e.g elderly people looking after even more elderly parents or vice versa). Guest bedrooms in addition to those within people's homes are also available on site.

7. The flats have been designed to **meet the needs of varying levels of support**, including:
    - 60 flats for extra care provision, 7 of which are designed and adapted for older people with memory loss or dementia ;
    - 8 flats for disabled young adults; and
    - 34 flats available for older people to rent.

8. An appointed organisation is available on site to provide personal care to those who are assessed and meet council eligibility criteria. The Llys Enfys development has been designed to allow onsite care to be adjusted according to the evolving needs of residents. This is with a view to ensuring that a **change of personal care or support needs does not necessarily have to mean a change in lifestyle or address for residents**. Consultation rooms are also available for use by health professionals and residents.

Facilities and activities

9. Members visited the various facilities available on site including the shop, laundry room, hairdressers and the communal lounge, restaurant and garden. These facilities are provided to ensure that residents can maintain their independence without needing to leave the building, and can use a **mix of services** as and when they are needed.

10. Each floor includes an **activity** room for any residents who wish to use such facilities – Members were shown one room were residents had raised money to purchase a pool table. We were also told that Llys Enfys has an active Social Committee that arranges a number of regular events. Residents are also active in designing and maintaining the garden in cooperation with an appointed gardening contractor.

11. Members were also told about the active links Llys Enfys and its residents maintain with the **local community**. Meetings about a local park were held in the communal area of Llys Enfys, and residents have been actively involved in campaigning for a bus route in the area. More widely, Llys Enfys also hosts meetings and talks for a number of third sector organisations with the aim of improving residents' knowledge, awareness and understanding of conditions such as dementia.

Sensory, memory and mobility problems

12. Linc Care staff also explained that collaboration with RNIB Cymru and the Alzheimer's Society has ensured that the building's design and layout is **practical for tenants with sensory, mobility or mental health problems**.

13. Committee members were shown that all signs were provided in Braille for residents with sight problems, and each floor of the building had a clear colour theme to limit confusion for those with sensory or memory problems. For those with limited mobility, handrails were available throughout the building and a dedicated room provided for residents to leave their mobility chairs and equipment in a safe environment without disrupting their own homes. Assisted bathrooms were also available within Llys Enfys and emergency chords available in all rooms of each flat in case assistance is needed urgently.

14. Seven flats within the Llys Enfys development are designed and adapted for older people with **memory loss or dementia**. These include door and floor sensors as well as equipment that can alert staff to over-flowing water or other similar occurrences.

Reablement

15. The Committee were told that, in the experience of Linc Cymru's work at Llys Enfys, many (if not most) residents find they need less care and support, once established there, than would have been the case in the community. Staff were keen to emphasise that ageing did not necessarily equate to increasing dependency and that individuals can regain health and capacity, as well as lose it.

Staffing and training

16. Members were told that Llys Enfys is managed by Linc Care staff whilst care services are delivered via an appointed on-site provider.

17. The Committee were told that Linc Care staff working at the facility are subject to **regular training** with some undertaking specific training on conditions such as dementia.

Funding

18. Members were told that the capital funding for the Llys Enfys development was provided via a c**ombination of social housing grant (56%) and private finance (44%)**. With respect to the private finance element, 10 of the 102 flats were funded by Linc Care funds with the remainder raised on the market.

19. **Fees** for residents vary depending on the different needs of residents. An integrated payment arrangement is in place whereby a proportion of residents' fees can be covered by any housing benefit or local authority funding for which they may qualify.

20. Members asked if any consideration had been given to selling flats within the complex on the **open market** akin to the McCarthy & Stone model. Linc Cymru staff told Members that, although such a model had been considered, it was not deemed economically viable due to lack of market interest in that particular location.

21. Development of new **extra care facilities** of this nature have been halted by Linc Cymru as the social housing grant is no longer available. Linc Cymru staff told Members that should further grants be made available, further facilities of this kind would be viable and developed by the organisation.

About Linc Cymru

22. Linc Cymru is a **not-for-profit housing association** specialising in the affordable housing, social care and health sectors in Wales.

23. Linc Care is one of Linc Cymru's two main strands of work (the other being Linc Homes). Linc Cymru provides **independent living services, nursing care, supported housing and sheltered housing**. Linc Cymru has seven independent living schemes across Cardiff, Newport and Blaenau Gwent and over 330 apartments in management. Linc Care has one nursing home and plans for the development of another two facilities of this kind in South Wales.

24. As a not for profit organisation, Linc Cymru expressed the view that a **stronger voice for the not for profit sector** – to be heard by the Welsh Government – would improve provision of services of this kind for older people in Wales. It was also felt that a platform on which they could come together would assist in sharing best practice in this field.

Health and Social Care Committee
HSC(4)-15-12 paper 7
Inquiry into Residential Care for older people – Feedback of engagement work to date – Note of visit to Hafod Care's Woodcroft Development

Health and Social Care Committee – Visit to Hafod Care's Woodcroft Development (8 February 2012)

Background

1. As part of the inquiry into residential care for older people, members of the Health and Social Care Committee visited Hafod Care's Woodcroft Development on 8 February 2012.

2. During the visit Committee members met staff representatives of Hafod Care and its parent body, Hendre Ltd. The purpose of the visit was to:

    - view brand new residential care facilities – including close-care flats and a residential care home – prior to them being opened for residents; and

    - learn more about the 'campus' based approach adopted by Hafod Care at the Woodcroft development.

3. The Committee chose to visit prior to the official opening of the care home to ensure that the Members' presence did not encroach upon the privacy of residents. It is intended that Members will have an opportunity to speak with individual residents – as part of the Committee's wider engagement work – during the course of the inquiry.

4. This paper summarises the key points raised during the Committee's visit.

History of the Woodcroft site

5. The Committee was told that the original care home on the Woodcroft site, built in the 1960s, was run by Cardiff County Council, with the assistance of Hafod Care. Hafod has now taken on the development with a long term lease at a peppercorn rent, which has allowed them to redevelop the facilities.

6. Members were told that the redevelopment has involved the demolition of the existing building and the building of a new care home on the site, as well as the building of a number of 'close-care' flats. The new care home is now due to be registered and is expected to be officially opened in April 2012.

About the new Woodcroft development

Residential care home facilities

7. Hafod staff explained to Members that there are 60 units in the care home – 24 on ground floor, and 18 on each of the other floors. The ground floor and half of the first floor is currently allocated for EMI accommodation. There is no bed space allocated for nursing care at present, although the building has been purposely designed to allow arrangements for this in the future, if necessary.

8. The Committee was told that the care home is divided into wings. This allows flexible use of space that can be re-allocated according to need as Members were told that EMI care requires doors to the shared spaces to be lockable, and has a restriction on the amount of open space available.

9. We were told that the care home cost £4.6 million to develop, which equates to approximately £75,000 per bed space. All the rooms are of the same standard, and all are en-suite.

10. Hafod staff explained that no social home grant was given for the development of the care home, although they believed that this would have had a minimum impact as the capital costs are quite small in comparison to outlays such as staffing costs etc.

11. Members understand that Cardiff Council has block booked 24 beds in the care home at an agreed rate. It was explained that this has helped Hafod Care as it ensures the home will always be partially occupied at the least. We were also told that Cardiff Council are closing a number of homes across the city, which has increased demand, but the nature of residential care is changing, with people staying in their own homes for longer. This, we were told, is having an impact on providers.

'Close-care' flats

12. In addition to the care home described above, Hafod Care also took Committee members to visit the 15 'close-care' flats built on the same site.

13. Unlike the land for the care home (which has been handed to Hafod Care on a long term lease at a peppercorn rent), we were told that the land for the flats has been purchased from Cardiff Council by Hafod Care at a commercial rate. Hafod Care explained that some social housing grant was available for the development of the flats and that the total cost of the development was £1.8 million (approximately £125,000 a flat).

14. Hafod staff explained that residents who live in the flats have all been nominated for these facilities through Cardiff Council.

15. We were told that the flats allow residents to live independently while having support mechanisms – such as a 24 hour care team and the housing support team – in place if needed. The residents of the flats are also able to access the facilities such as meals and activities run in the home when they choose. Staff explained that this also creates a link with the home if the future needs of

residents of the flats mean that they want – or need – to move into that alternative setting at a later point in life

Staffing, funding and resourcing the development

16. The Committee were told that around 90 staff will be employed at the development –mainly from the locality. Our hosts explained that many employees choose to come in from the private sector, not least as the organisations runs a good induction and training programme. In addition to employing local staff, the organisations also tries to support local businesses and buy locally where possible.

17. We were told that the fee structure for the home is approximately:
    - £450 per week for basic residents
    - £530 per week for dementia patients
    - £700-£750 per week for nursing care

18. Staff explained that, from their information, these fees are avourable in comparison to the private sector, which tends to charge higher fees and often charges additional payments e.g. extra charges for a television. Staff also suggested that, when compared with the cost to the NHS of one night in a hospital bed and where clinically appropriate, residential care costs can offer a better-value alternative.

About the Hafod Care model

19. Staff of Hendre Ltd and Hafod Care explained that:

    - Hafod Care is a charitable Housing Association that provides a wide range of housing and support services to over 1000 people each year across South and West Wales and is part of the Hendre Group. It is run as a not-for-profit company.

    - As a not-for-profit company it generates funds through borrowing and generating surplus. It reinvests surplus money into new and existing projects – any money made does not go to shareholders. They have operational targets to create a surplus, but this profit is not made at the expense of the residents care. The Woodcroft development will run at a deficit for a few years.

Health and Social Care Committee
HSC(4)-15-12 paper 8
Inquiry into Residential Care for older people – Feedback of engagement work to date – Note of visit to Bethel House

Health and Social Care Committee – Visit to Bethel House, Dinas Powys (28 March 2012)

Background

1. As part of the inquiry into residential care for older people, members of the Health and Social Care Committee visited Bethel House in Dinas Powys on 28 March 2012.

2. During the visit Committee members met staff and residents from Bethel House. The purpose of the visit was to:

    - Visit an established more traditional residential care home and discuss with staff about the challenges of delivering residential care.

3. The Committee were invited to visit Bethel House by Brian West, who is the Chair of the Vale of Glamorgan Care Home Association.

4. This paper summarises the key points raised during the Committee's visit.

About Bethel House

5. Bethel House is run along a Christian ethos, and was set up as part of the Hebron Hall centre. It can sleep 39 residents, and has provision for 7 EMI beds. It is a not for profit home.

6. People enter the home from a variety of routes – for example some people choose to go because of religion, while others move in because of the location.

7. The average age of their residents has increased over recent years; most are now in their nineties. As home owners they have noticed a trend to encourage people to stay at home for as long as possible, as opposed to entering care.

8. Members were told how Bethel House tries to address the fear factor around moving into residential care by trying to make it clear that it is the resident's home and that this the move should be seen as a change of address. While they find that few people look forward to moving into the home, but they find once the person is settled in the home they tend to be much happier and healthier for a number of reasons such as they are more likely to take their medication regularly and they have more regular contact with a range of people and social activities.

9. Bethel House has just appointed an activities co-ordinator who will build on the existing range of activities they have in the home which includes thought of the day, a Sunday service, and craft activities. There is also a local shop which sets up in the home on a regular basis.

Staffing and training

10. There are 40 people employed in the home, who work a series of shifts. Bethel House owners told the Committee that they have not had substantial issues with regards to recruitment and retention, which they believe is down in part to the rate of pay they offer and the current employment situation.

11. There has been a lot of development around the level of staff training, which has changed expectations. It was suggested that the provision of NVQs were good, but that not everybody who worked in the care setting wanted to do this.

12. As part of the visit, Members spoke to Kay who had worked in the home for 18 years. She decided to move into the caring profession after her experiences of caring for her mother and wanting to undertake a similar role for other people. She thought it was a great place to work, and that this was down largely to the management of the home. She thought the positive atmosphere was also because of the residents all cared about each other, and considered themselves to be part of a large family- for example they were planning to throw a street party for the diamond jubilee celebrations.

Joint Registration of Residential Care and Nursing Care

13. Members were told that at Bethel House the aim is to try and maintain the focus on people, even as dementia develops. In order to do this they try to assess and accommodate the care needs of residents, and would only move them to an alternative facility as a last resort.

14. The owners of Bethel House said they would encourage the joint registration of residential and nursing care to help address the issues of moving people from where they are settled. They said that it can be really tough with couples who may end up being separated; they try to keep them together even if one person is diagnosed with an illness which requires nursing care.

Funding and Regulation

15. Members were told that the Local Authority will try to buy care at the cheapest possible rate, which tends to result in a battle every year to minimise the price differential between actual cost and what the Local Authority will pay. The differential this year is only £7 which is manageable, but has previously been as much as £30 a week.

16. Representatives from the house talked about how there should be some flexibility in the regulations and a greater focus on care –for example they have

to have 5 bathrooms as there are 40 residents, but they do not have the staff levels to use all the bathrooms at once.

Health and Social Care Committee
HSC(4)-15-12 paper 9
Inquiry into Residential Care for older people – Feedback of engagement work to date – Note of reference group meeting 17 April 2012

HEALTH AND SOCIAL CARE COMMITTEE – INQUIRY INTO RESIDENTIAL CARE FOR OLDER PEOPLE

REFERENCE GROUP MEETING (17 APRIL 2012)

Background

1. The Health and Social Care Committee established a reference group for its inquiry into residential care for older people in spring 2012. The group comprises those who have recently – or who are currently – supporting friends and family in residential care settings, or who are facing the prospect of doing so in the future.

2. The role of the external reference group is to provide a view to the Committee on the key issues raised during the course of the inquiry. This includes their views on the extent to which they feel that the information being provided in evidence reflects their own personal experiences and the extent to which they agree with the current policy direction for residential care for older people.

3. The reference group will meet on a monthly basis during the course of the oral evidence gathering, considering evidence already received and proposing lines of inquiry for future evidence sessions. All notes of reference group meetings will be agreed by the group prior to publication.

Summary

4. The group met on 17 April 2012 to discuss the key themes emerging from the Health and Social Care Committee's evidence sessions on 23 February (Scene Setting), 29 February (Service Users, their families and carers), 14 March (Local Health Boards) and 22 March (Local Authorities).

5. The group felt that much of the evidence put forward to date displays common sense, and wondered why many of the suggested approaches to improving care for older people have yet to be implemented in full. The group was also keen to emphasise that many positive examples of residential care exist, and hope that the Committee's inquiry and report does not focus on the negative aspects of residential care alone.

Key themes

6. The reference group agreed that the key themes emerging from the formal evidence sessions listed in paragraph 4 are as follows:

   - The poor **public perception** of care homes and the need to improve this amongst prospective residents and the general public more widely;
   - The need for better support and **information** for those on the journey to residential care;
   - The need to improve assessment processes, in terms of timing and to take account of changing need;
   - The need to address **dignity** issues within residential care homes.
   - The need for a **continuum of care** whereby the evolving needs of residents can be accommodated in one location, as opposed to requiring residents to move premises as their needs change;
   - The importance of supporting **early intervention** and availability of preventative services, alongside better timing of assessments and options on discharge from hospital;
   - Training and recruitment of **staff,** (and an increased recognition of social care as a career);
   - Better **integrated working** between those involved in delivering residential care (including work between health and social care);
   - The importance of **activities** and stimulation within the care setting;
   - The challenges of delivering care for older people in rural areas.

7. A number of other issues emerged which the group agreed to consider at a future meeting. These were **regulation and inspection**, and the **funding** of care.

8. In exploring the key themes and the evidence heard the group made the following points:

   - Something needed to be done to address the **poor public perception of life within care homes and of the staff working within them**. The group was very concerned that people entering homes had low expectations, and wanted to make sure that people entering homes continued to lead fulfilling lives. Group members felt that there was a place in society for residential care, alongside

other models of care provision, as living alone at home could be a very lonely existence.

- **The lack of support and information available to people and their families on the journey into residential care** rang true for many group members and their experiences of choosing care homes. Group members spoke of how there was a lack of information available about homes, and how they had not been clear about what to look for in a good care home when navigating the process. The group raised the question of what good care looked like, especially in terms of dementia. It was suggested that people who had been through the system would be a good source of support and information for those families on the residential care journey – this could be helpful as the group felt that they were expected to become experts on residential care very quickly which was more difficult given the crisis situations with which they were often faced. They felt that if information about types of care etc. was available it was very difficult to locate and was not actively shown to those who may need it.

- Particular concern was expressed in relation to the lack of information and **support available to self-funders**, who may not be encouraged to access help from local authorities. Problems were also highlighted with the process for seeking NHS continuing health care funding, especially for people with dementia.

- The need for a **continuum of care** was a key concept for the group. Some group members had experienced the difficulties of relatives being transferred from residential care home to nursing homes and the upheaval and distress this caused. In particular, the difficulty of having to make new relationships with staff and residents and the limited choice of care homes were discussed. The group emphasised however that, should care homes evolve to provide the continuum of care under one roof, safeguards would be needed to ensure the maintenance of adequate staff levels for all types of care within that setting.

- The group discussed the **assessment process for entering residential care** and the best time to carry out an assessment. The group agreed that conducting assessment whilst an individual is hospitalised is not optimal, particularly given that improvements in an individual's health can occur once discharged from hospital. It was suggested that improved assessments undertaken at a later, more appropriate time, could increase the number of options available to older people, including a return to their own home.

- The group provided a number of examples involving their

relatives losing crucial possessions, including dentures, hearing aids and glasses whilst in residential care (and hospitals), and subsequent difficulties in accessing opticians/dentists and other professionals to arrange replacements. The group agreed that access to services and implements of this kind are fundamental to achieving **a basic and acceptable level of dignity**. The group felt this was, in part, linked to the quality of assessments of residents' health when entering the care setting, and the need for a better understanding amongst staff of the importance of taking steps to ensure individuals' sensory and dental needs are monitored as a matter of course . This was an area which the group thought could be improved.

- The group discussed whether residential care homes could become more like **local resource centres** where carers could go and meet up, with day centres integrated into the home, and better links with the community could be established. There was some concern expressed about the feasibility of this given the existing structures and the current climate of limited resources. It was felt however that this approach could help increase **community involvement** and help to reduce the stigma attached to care homes.

- The group felt strongly that care should be seen as a vocation akin to medicine or teaching and expressed its view that there is an ongoing **need for training and recruitment** of staff who are suited to the profession. The group felt that training appeared to miss matters relating to basic dignity and areas they considered as common sense and argued that there is a need for work experience to be included within the training. The group discussed how working in the care profession could be very rewarding , and that this needs to be understood if the perception of working in this area is to improve. A suggestion was made that staff in residential care need the '3 Ts': training, time and temperament.

- In addition to better training for staff, the group discussed the **need for support and training for carers**. It was felt that, often, people did not identify themselves as carers and, as such, did not get the support they needed.

- The need for the services delivering residential care e.g. health, local authorities, and third sector to **work together** was important to the group. Group members thought that there should be a mix of people providing care alongside professionals, such as volunteers within the community. The need for clarity of roles was also discussed such as the different roles of care workers and social workers. It was felt that better joint working may also yield savings.

- The group emphasised the importance of the provision of **appropriate activities and stimulation** within care settings. The group agreed that appropriate activities and stimulation are fundamental to ensuring quality of life for residents, and that there is a need to raise awareness of what appropriate activities and stimulation within homes means for the different types of people in the various care settings. The group did not feel that organised group events alone were sufficient; residents may prefer to pursue their own personal interests, or to sit with a member of staff for five minutes over a cup of tea.

- The provision of independent advocates was considered very important by the group. The advice and support they could offer to those within the care system was considered very valuable. Group members expressed concern about advocates not being able to enter some homes, and wondered if something could be incorporated in the CSSIW reports about this.

- The importance of early intervention and reablement was discussed by the group. It was suggested that the variety and quantity of this could help prevent unnecessary admissions into care homes and allow people more freedom to decide on their future care. However, the group stressed that more needed to be done to make sure people were aware of these options and able to access them.

Questions for future sessions

9. The group also briefly discussed key questions to ask future witness, and suggested:

    - Asking the third sector what they think the scope of wider joint-working with health/local authorities and communities is;

    - Discussing with the staff bodies about how to address the risk-averse nature of some care homes in terms of inviting people into homes [the group agreed that this does not help with enhancing the understanding and perception of care homes].

    - Ensuring that the Committee has an opportunity to speak directly with care home workers, particularly given the lack of a dedicated representative body for them.

Health and Social Care Committee
HSC(4)-15-12 paper 10
Forward Work Programme

HEALTH AND SOCIAL CARE COMMITTEE: WORK PROGRAMME AND TIMETABLE

Purpose

1. The purpose of this paper is to outline the anticipated business for the Health and Social Care Committee's timetable for autumn / winter 2012 and to seek Members' views on the Committee's forward work programme.

Background

2. The Health and Social Care Committee is responsible for examining legislation and holding the Welsh Government to account by scrutinising expenditure, administration and policy matters encompassing: the physical, mental and public health of the people of Wales, including the social care system.

3. To date, the Committee's programme has comprised policy work in the main. Looking to the autumn and winter terms, the emerging picture suggests that it will be an intensive period with respect to the Committee's legislative responsibilities.

Identified business for September – December 2012

4. A number of pieces of **legislation** are likely to be referred to the Committee for formal consideration over coming months, details of which are outlined in Annex A to this paper. It is anticipated that the majority of the Committee's time between September and December 2012 will need to be allocated to this work.

5. In addition to its legislative work, the Committee's consideration of the **draft budget** for 2013-14 will also need to take place during this period.

6. Inevitably, therefore, the Committee's ability to undertake **policy** scrutiny is likely to be more limited than it has been over the last 12 months. Some scope does exist, however, to incorporate a flexible piece of policy work in and around the Committee's legislation and budget commitments.

Options

7. Given the shift in the balance of the Committee's work, any policy inquiry identified by the Committee will need to be sufficiently flexible to fit around the fixed timetables associated with legislation and budget scrutiny.

8. It is proposed, therefore, that the Committee identify one policy subject for consideration during the autumn / winter term. This work could then be scheduled around its anticipated legislation and budget commitments.

9. Once a subject has been identified by the Committee, a scoping paper and draft terms of reference will be provided by the Committee Secretariat for Members' consideration. It is proposed that the Committee launches a written consultation over the summer period to allow sufficient time for evidence to be submitted for the autumn term.

10. A list of possible topics suggested by Members and / or stakeholders in the past is attached at Annex B to this paper to help inform Members' consideration.

Action

11. Members are invited to:

    (i) consider the options outlined in paragraphs 7 – 10;

    (ii) propose any initial ideas for inquiry topics.

ANNEX A – Anticipated timings for proposed legislation

Please note that the timings provided below are indications only and are based on information provided by members in charge of the legislation. All dates are subject to change by the relevant member in charge.

Bill	Member in charge	Timing
Food Hygiene Rating Scheme (Display of Information) (Wales) Bill	Government Bill – Lesley Griffiths AM, Minister for Health and Social Services	Stage 1: Summer – Autumn 2012 Stage 2: Autumn 2012
Social Services (Wales) Bill	Government Bill – Gwenda Thomas AM, Deputy Minister for Children and Social Services	Stage 1: Autumn – Winter 2012 Stage 2: Winter – Spring 2013
Organ Donation (Wales) Bill	Government Bill – Lesley Griffiths AM, Minister for Health and Social Services	Stage 1: Winter 2012 Stage 2: Spring 2013
Public Health (Wales) Bill	*Government Bill – Lesley Griffiths AM, Minister for Health and Social Services*	*Second half of 5 year government term*

Members may also wish to be aware that the **Asbestos (Recovery of Medical Costs) Bill**, proposed by Mick Antoniw AM, has been granted leave to proceed by the Assembly. This is likely to fall within the Health and Social Care Committee's remit and, as such, may be referred for Stage 1 and Stage 2 consideration by the Committee in autumn / winter 2012.

ANNEX B – Possible policy inquiry topics suggested to date

The list below contains ideas already suggested by Members / stakeholders. Members are not obliged to select a subject from this list – it is provided for information only. A longer list / more details can be provided at a later date if required.

- Use of ICT in the NHS
- Mental Health Strategy / Services in Wales
- Access to medicines / treatments in Wales
- Learning Disability Service
- Prison Healthcare
- Nurse specialists and nurse consultants
- Co-responder services in Wales
- Health inequalities
- Post-traumatic Stress Disorder

Health and Social Care Committee
HSC(4)-15-12 paper 11
One-day inquiry into venous thrombo-embolism prevention – Evidence from 1000 Lives + / Public Health Wales

1000 Lives Plus and Public Health Wales

Response to the National Assembly for Wales Health and Social Care Committee: call for evidence on venous thrombo-embolism prevention

This paper is in response to the request for written evidence by the Health and Social Care Committee undertaking the one-day inquiry into venous thrombo-embolism prevention in hospitalised patients in Wales.

The paper focuses upon the national approach taken by 1000 Lives Plus and the actions of the central team. It should be read in conjunction with the individual Health Board and Trust reports.

The following areas are covered in the paper:

1. An introduction to 1000 Lives Plus
2. The case for preventing VTE
3. Reducing Surgical Complications - Preventing VTE
4. Hospital Acquired Thrombosis – mini-collaborative
5. Moving forward
6. Transforming Maternity Care and Preventing VTE
7. Next Steps
8. Appendix 1: Timeline

1. An introduction to1000 Lives Plus

1000 Lives Plus is the national improvement programme, supporting organisations and individuals, to deliver the highest quality and safest healthcare for the people of Wales.
It focuses on three key areas to spread and embed quality improvement:

i. Establishing a common and consistent approach to improvement across all NHS organisations in Wales.
ii. Developing a public and patient-driven NHS.
iii. Establishing a commitment to developing capacity and capability among the NHS workforce.

1000 Lives Plus takes forward the standardised improvement methodology, use of evidence-based interventions and measurement for improvement introduced by the 1000 Lives Campaign and Intelligent Targets work.

Data are used to focus improvement efforts – using measurement for learning and not for judgement, accountability or comparison. Data in the Campaign and within the national programme is collected by organisations and for their own improvement use. Process measures enable organisations to control variation and ensure reliability in their processes. Outcome measures reflect the impact on the patient or system and show the end result of an organisation's improvement work.

The role of 1000 Lives Plus is to support organisations with their improvements, not to performance manage their work. Data is not collected or aggregated by 1000 Lives Plus.

2. The case for preventing VTE

1000 Lives Plus reviewed the evidence for preventing VTE and found a substantial case for evidence-based improvement through small tests of change.

In 2005, the Health Select Committee identified that, in the UK:

- Pulmonary Embolism (PE) following Deep Vein Thrombosis (DVT) in hospitalised patients causes between 25,000 and 32,000 deaths each year.
- PE following DVT is the immediate cause of death in 10% of all patients who die in hospital.
- The total cost (direct and indirect) to the UK of managing VTE is estimated at £640 million.
- VTE in hospitalised patients is largely preventable through the use of thromboprophylaxis during the hospital stay of the patient and, in some cases, continuing after discharge.[1]

In late 2009, Sir Liam Donaldson and John Smith (MP) reaffirmed the priority of preventing hospital acquired thrombosis (HAT), in their foreword in Venous Thromboembolism Prevention (DH 2009) they stated:

> "In 2007 there were 16,670 recorded deaths in England and Wales where Pulmonary Embolism and Deep Vein Thrombosis (VTE) were mentioned on the death certificate (Office of National Statistics).
>
> However, the overall death rate from VTE in hospital and the community is likely to be significantly higher since the condition is often clinically silent and deaths are not being identified due to a reduction in post-mortem examinations.
>
> The emerging picture of death and acute and chronic disability (such as chronic venous insufficiency, venous leg ulcers and pulmonary hypertension) leaves no room for complacency when low-cost effective preventative treatments are available.
>
> VTE prevention is, above all, about saving lives and reducing long term ill health. This is common and often avoidable. We have long known of safe, effective and straightforward methods of prevention and will continue to work towards widespread recognition that VTE prevention is one of the most important new patient safety issues …."[2]

A report by NCEPOD (2009) explored the care of patients who died within four days of admission to NHS and private hospitals in the UK, and found that only 55% of patients admitted under a surgeon and 38% of patients admitted under a physician received venous thromboembolism prophylaxis.[3]

3. Reducing Surgical Complications - Preventing VTE

The 1000 Lives Campaign was launched in April 2008 and took forward a number of actions from the *Healthcare Quality Improvement Plan: Designed to Deliver 2006* (QuIP). It aimed

[1] *House of Commons (2005). House of Commons Health Committee Report on the Prevention of Venous Thromboembolism in Hospitalised Patients.*
[2] *Department of Health, Venous Thromboembolism Prevention: A Patient Safety Priority King's Thrombosis Centre, 2-3.*
[3] *NCEPOD (2009). Caring to the End? A review of the care of patients who died in hospital within four days.*

to save an additional 1000 lives and to avoid up to 50,000 episodes of harm in Welsh healthcare in two years.

The evidence-based content areas were developed by clinicians in Wales, based upon an appraisal by the former NPHS of the evidence base relating to 12 proposed Institute for Health Improvement interventions. Four interventions were prioritised based on their effectiveness and transferability to NHS Wales, including 'Preventing and reducing surgical complications,' and an additional two areas were added.

Within the Reducing Surgical Complications area, three drivers for improvement were identified, including 'Prevent Perioperative Cardiovascular Events.' One of the interventions within this driver was to 'Identify patients at risks, and provide appropriate DVT prophylaxis.'

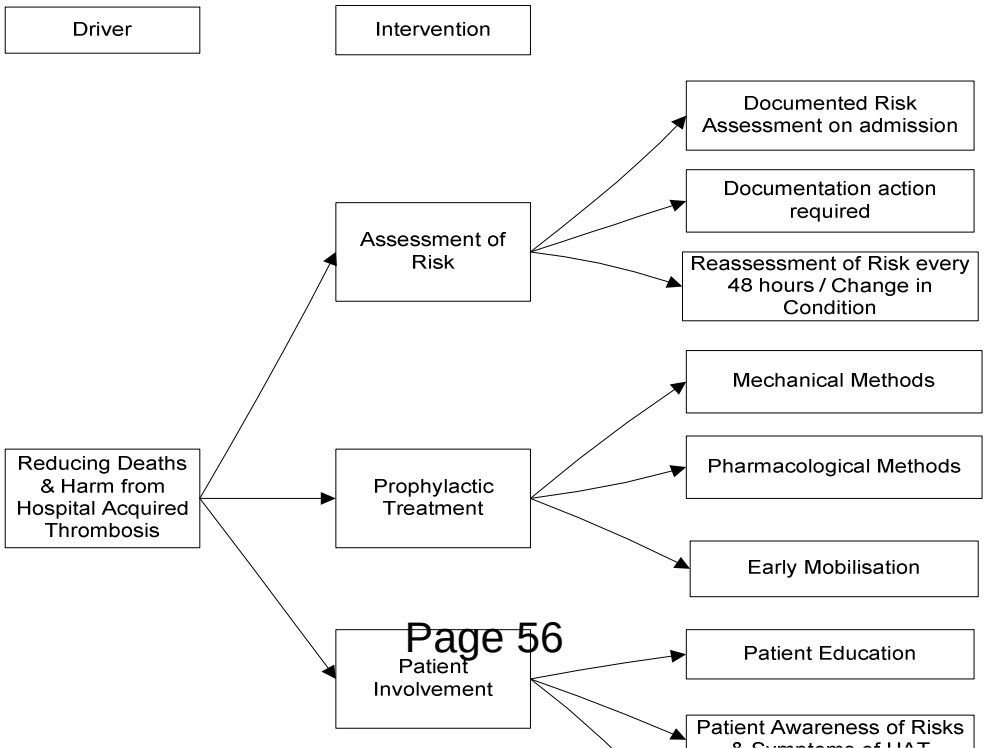
An evidence-based How to Guide was developed for Reducing Surgical Complications and eight Health Boards and Trusts participated in a national mini-collaborative, sharing ideas and knowledge, sharing methodologies for change, implementing proven concepts, and measuring change.

The area proved a challenge to many organisations and it was also delayed by the late introduction of an All Wales Risk Assessment document. All organisations signed up to this area but only three were posting data on risk assessment. Implementation concentrated on pre-assessment clinics for elective surgery was yet to spread to ward areas where patients were admitted directly. Only two organisations were posting data for VTE prophylaxis at this point in time.

4. Hospital Acquired Thrombosis - mini-collaborative

In January 2010, following a review of the evidence available regarding VTE and progress made by organisations, it was agreed to deliver a 12 month mini-collaborative specifically around VTE prevention.

A driver diagram and How to Guide specifically on the area were produced by Dr Simon Noble, Peggy Edwards and Dr Jonathon Gray. Special input was received from Lifeblood: The Thrombosis Charity, the All Party Parliamentary Thrombosis Group, the Department of Health VTE Implementation programme and organisations who contributed case studies.



In this mini-collaborative, the mission of the 1000 Lives Campaign and participating health care organisations was to work together to develop a systematic approach to VTE prevention to reduce avoidable death and harm in hospital patients in Wales. This was to be achieved through the collaborative by the implementation of the All Wales Risk Assessments and appropriate prophylaxis for all in-patients in Wales. Organisations initially focused on a patient population, for example orthopaedic patients; a specific ward; or a specific team.

Goals for participating organisations included:

- Reduce incidents of HAT by 50% in 18 months
- Achieve 100% compliance with risk assessment and prophylactic treatment of in patients by December 2010
- Raise awareness among professionals and the public of HAT prevention and the All Wales Risk Assessment
- Engage with all healthcare professionals, senior managers and doctors in implementing HAT risk assessment in local hospitals and in assessing compliance across the NHS
- Develop better measures and feedback mechanisms on HAT in hospitals
- Raise awareness of HAT prevention in primary care and the community in general.

Organisations completed monthly reports (via the IHI extranet) and considered ways of gathering data monthly such as using risk assessment forms filled out as patients are admitted or follow up inspection of notes.

Process measures:

- Percentage of surgical/ medical patients who have a documented assessment for the risk of developing a HAT.
- Percent of in-patient whose risk assessment is actioned appropriately
- Percent of in-patients whose risk assessment is reviewed at 48 hours and documented

Outcome measures:

- Number of surgical/ medical patients who experience a HAT.

Schedule for the Learning Sessions:

Learning Session 1: 12 January 2010
Learning Session 2: 8 June 2010
Learning Session 3: 16 December 2010

5. Moving forward

At the end of the collaborative in March 2011, there were notable achievements across Health Boards and Trusts. The development of five All Wales Risk Assessment Tools triggered organisations to adopt the all Wales tool, adapt the tool or develop their own bespoke tools. Without the initial prompt for the All Wales Thrombosis Group this work would have been significantly delayed. The work had concentrated upon the implementation of the risk assessment only. The re-assessment of patients on an ongoing basis and ensuring the appropriateness of prophylaxis was identified as a challenge which required support in the service.

The inclusion of the process measure of % patients risk assessed in the Annual Operating Framework from October 2010 helped focus organisations. However, the challenge of the various measures that require data collection across the whole programme was acknowledged as significant for the front line teams.

It was proposed that the Maternity collaborative would continue the work for pregnant women, and Enhanced Recovery After Surgery (ERAS) would pick up surgical patients prophylaxis.

Following the publicity from NHS England in the summer of 2011, the Medical Director for NHS Wales requested a progress update and this was provided by 1000 Lives Plus.

With the ending of the collaborative in March 2011, responsibility for the continuation of the work was passed back to Health Boards and Trusts. 1000 Lives Plus team were approached in the June of 2011 by VTE leads who were concerned at the lack of progress. It was agreed that 1000 Lives Plus would convene a one-off learning event in September 2011 to assess the situation. The event successfully brought together the VTE leads for the seven Health Boards plus Velindre NHS Trust. It was billed as making VTE assessment part of the 'day job'. Three key issues of measurement, clinical engagement and senior management support emerged from the discussions on the day.

The creation of a HAT rate was made the aim for the following six months based on a methodology pioneered in Betsi Cadwaladr University Health Board. It was also agreed that 1000 Lives Plus would arrange a follow-up meeting in March 2012 to assess progress. At that meeting five of the seven Health Boards plus Velindre were able to demonstrate a HAT rate and provide data showing their current performance. The other two Health Boards left with plans in place to do likewise. There is still work to do to evidence the comprehensive nature of risk assessment.

6. Transforming Maternity Care and Preventing VTE

The overall aim of the Transforming Maternity Services Mini-Collaborative is to improve the experience and outcomes for women, babies and their families within Maternity Services. One of the drivers in achieving this aim is to reduce the risk of venous thrombo-embolism in pregnancy. It was launched on 3 March 2011 at the Royal Colleges of Midwives (RCM) annual conference.

The Transforming Maternity Services Mini-Collaborative brings together experts, clinicians and managers to effect change at the bedside (from the 'bottom up'). It is endorsed by Welsh Government, all Health Boards in Wales, the RCM, and Obstetricians and Gynaecologists (RCOG) in Wales.

Learning events have been scheduled as follows to support the all Wales mini-collaborative:

- Learning Session 1: 4 March 2011
- Learning Session 2: 7 June 2011
- Learning Session 3: 24 November 2012
- Learning Session 4: 29 May 2012

Following consultation with experts from within Wales and the relevant endorsement committees, consensus has been reached to enable universal VTE risk assessment to be implemented throughout Wales, with two Exemplar DVT Risk Assessment templates – one relating to the initial 'Booking' visit, which is to be included in the National Hand-Held

records and one relating to Antenatal Admission and the puerperium (postnatal period). This has been a significant achievement for the mini-collaborative in a short period of time and is now allowing maternity units to proceed with implementation of the bundles.

All Health boards within Wales are currently implementing these risk assessments following localisation and agreement within their scrutiny committees.

Work is also underway to implement a combined antenatal booking and admission risk assessment within gynaecological wards alongside the general DVT risk assessment.

7. Next Steps

1000 Lives Plus is working with organisations to develop an outcome measure for the HAT rate. Six out of eight organisations already have a process in place for achieving this and the other two are working on towards this.

Achieving an all-Wales HAT rate is one of the programme's short term ambitions. This is an important step forward and Wales may be the first country to achieve a national HAT rate.

Appendix 1: Timeline

Date	Event
April 2008	1000 Lives Plus Campaign launched and one of the interventions within the Surgical Complications content area is to 'Identify patients at risks, and provide appropriate DVT prophylaxis.'
December 2009	A review of the evidence available regarding VTE and progress made by organisations, led to agreement to deliver a 12 month mini-collaborative specifically around VTE prevention.
12 January 2010	VTE Learning Session 1: 'Count me in to stop the clots.' The session focused upon progress to date, reviewed the improvement methodology and worked with LifeBlood to present the case for change.
8 June 2010	VTE Learning Session 2. This session focused upon risk assessment and prophylaxis, with organisations sharing their feed back on the early stages of testing documentation.
16 December 2010	VTE Learning Session 3. This session focused upon spreading and embedding changes however organisations were still the use of forms in surgical areas, with delays in implementation.
3 March 2011	Maternity mini-collaborative launched at the annual RCM conference by the Chief Nursing Officer for Wales.
4 March 2011	Maternity mini-collaborative Learning Session 1
30 March 2011	VTE mini-collaborative formally ends and responsibility for the continued implementation of the work is passed to organisations.
7 June 2011	Maternity mini-collaborative Learning Session 2
24 November 2011	Maternity mini-collaborative Learning Session 3
July 2011	Report on progress with VTE prevention submitted to Medical Director for NHS Wales.
8 September 2011	Learning event for Health Boards and Trusts at the request of organisations, focussing on making VTE assessment part of the day job.
15 March 2012	Follow up learning event to assess progress by Health Boards and Trusts in demonstrating a HAT rate and provide data showing their current performance.
29 May 2012	Maternity mini-collaborative Learning Session 4

National Assembly for Wales' Health and Social Care Committee
Inquiry into Venous Thrombo-Embolism Prevention in Hospitalised Patients

Aneurin Bevan Health Board evidence

Introduction

The House of Commons Health Committee reported in 2005 that an estimated 25,000 people in the UK die from preventable hospital-acquired venous thromboembolism (VTE) every year. However, in addition to an unacceptable mortality rate due to preventable VTE, it is important not to ignore the effects of *harm* to patients who acquire a preventable venous thrombo-embolism. Reliable Risk Assessment and treatment, also engagement of patients and families in their care is of paramount importance to reduce the risks of mortality and harm due to Hospital Acquired Thrombosis (HAT).

Aneurin Bevan Health Board takes the risks to patients of hospital acquired thrombosis very seriously and has worked hard to implement the recommendations made in NICE Clinical Guidelines 92 and has fully engaged with the 1000 Lives Plus mini-collaborative work to reduce the risk of HAT. The Medical Director is the executive lead for this work and reduction of HAT is expressed as an ABHB priority to improve the safety of patient care through the ABHB Mortality Driver Diagram.

Implementation of NICE Guidance

The ABHB Thrombosis Committee is a multidisciplinary group which has a responsibility for implementing NICE Clinical Guidance 92: reducing the risk of VTE in patients admitted to hospital and the ABHB Haematologist Clinical Lead for this guidance chairs this group. The group's membership includes representation from the 1000 Lives Faculty, consultant staff, pharmacy, pathology, theatres, anticoagulation service and quality improvement. NICE Technology Appraisal recommendations around pharmacological interventions to prevent thrombosis are also discussed at this group. Clinical policies have been implemented including:

- Thromboprophylaxis in Surgical Patients
- ABHB Peri-Operative Anticoagulation in Elective Surgery for Patients on Warfarin
- ABHB Guidance on use of Rivaroxiban
- ABHB Guidelines on the prevention and treatment of thrombosis in pregnancy

In order to understand health board compliance with NICE CG92, the responsibility for audit of compliance with NICE guidance is predominantly held within each division. Recent audits have been carried out in Surgery, Medicine and Pharmacy. However measurement of compliance with Risk Assessment for VTE and thromboprophylaxis is being carried out through the 1000 Lives Plus work.

Implementation of the 1000 Lives Risk Assessment

A 1000 Lives Plus HAT Steering Group was set up to oversee the implementation of HAT prevention drivers which include the HAT Risk Assessment Tools. This multidisciplinary group is led by the consultant Clinical Lead for the All Wales mini-collaborative to reduce harm from VTE. Using the Model for Improvement to implement the Risk Assessment Tools, lead pharmacists in Surgery and Medicine have carried out PDSA cycles to test and alter the All Wales Risk Assessment Tools in pilot

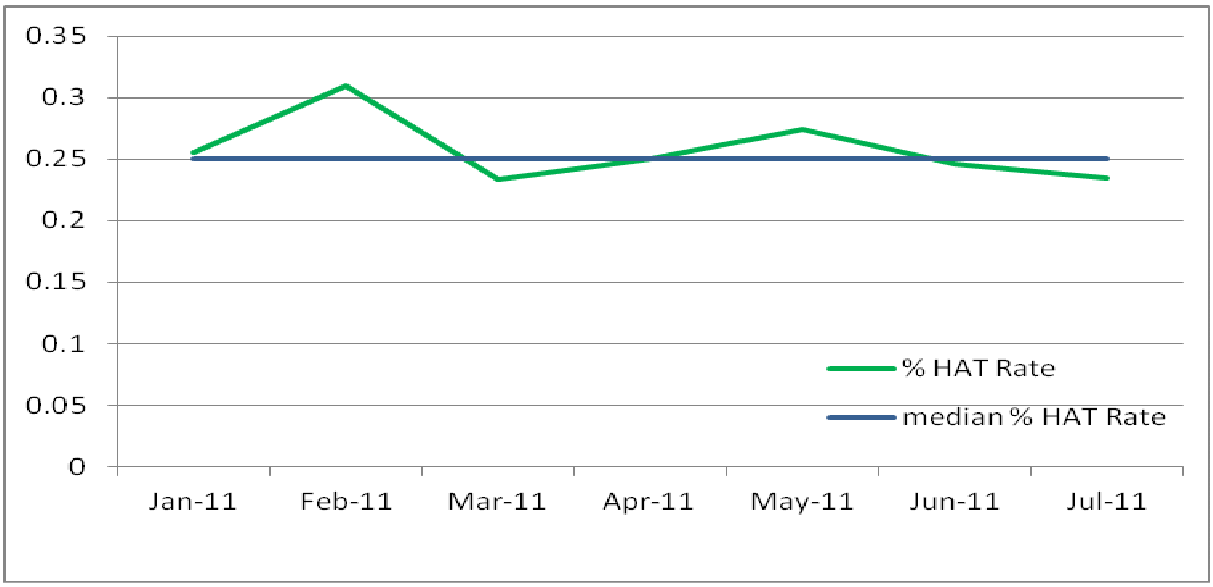
areas. The Risk Assessment Tools for Acute Surgery and Acute Medicine have recently been incorporated into doctors clerking packs. The tools for Acute Trauma and Elective Orthopaedics are being piloted on several wards and the Orthopaedic Surgical Unit. Specific drugs included in the ABHB formulary have been included on the Risk Assessment Tools in order to standardise the use of pharmacological intervention. An All Wales Risk Assessment Tool has been devised for obstetric patients and incorporated into the Admissions Bundle by the All Wales 1000 Lives Maternity Mini-Collaborative. This tool is currently being tested in pilot wards across ABHB who are achieving good compliance. Mental Health Services have also devised a Risk Assessment Tool for Healthcare Acquired Thrombosis which is being piloted and audited.

Ongoing measurement of the process of risk assessment and management of patients at risk of VTE is being carried out in several areas. For patients undergoing surgery this is audited through the ORMIS Theatre Management System. Baseline measurement data is being collected for specific areas across medicine to be followed up with ongoing measurement. Links between this work and that of the Enhanced Recovery After Surgery Programme (ERAS) has been made in the Orthopaedic Surgical Unit because risk assessment for HAT is included in the ERAS bundles. Baseline data in the unit had shown that formal risk assessment for elective knee replacement patients had been around 20% and this has improved to 80% after the risk assessment form had been implemented.

Measurement is a key component of the Model for Improvement used to implement change. Progress has been made to measure the processes of care at ABHB. However, it is important to assess the effect the improvement work is having on outcomes. One of the most important components of this work is to derive a Hospital Acquired Thrombosis Rate (HAT Rate) for the Organisation and to be able to split this rate into specialties and divisions to inform local quality improvement work. The HAT Rate is important not only to assess the progress of improvement work but may be used to engage differing specialties. For instance, often patients admitted under a surgical specialty, who acquire a HAT up to three months following discharge, are either not re-admitted, or re-admission is under a different specialty, eg. medicine. This means that the original staff caring for patients perioperatively may never know that their patient has had a HAT post discharge. Therefore they may not know the effects of not adequately risk assessing and managing patients at risk of HAT. The HAT Rate will enable clinical staff to know the incidence of HAT post-discharge for their patients.

Aneurin Bevan Health Board is currently pulling together data to produce a HAT rate for specialties, divisions and the health board. This is based on a method devised in Betsi Cadwaladr Health Board which has been tailored for use in ABHB. Once validated, this data will be reported each month to the health board. Each case of hospital acquired thrombosis is currently being reviewed by consultant staff leading this work. Root Cause Analysis enables further learning about the care provided for each patient. For instance, if risk assessment tool place, was the risk managed appropriately, was the HAT preventable. Preliminary data, that has not been fully validated through casenote review indicates that the Health Board has a median HAT Rate of 0.25%, and that around half of the cases of HAT were preventable, although it is acknowledged that even with appropriate risk assessment and thromboprophylaxis, HAT may not always be prevented. The run chart below shows the HAT rate between January to July 2011, next steps are to collect ongoing monthly data.

ABHB HAT Rate – January to July 2011



Effectiveness and Utilisation of pharmacological and mechanical prophylaxis for VTE

Mechanical thromboprophylaxis is being used for surgical patients however for medical patients this is not evidence based. Nurses have been trained as per NICE guidelines. For pharmacological thromboprophylaxis there continues to be variation in practice sometimes due to the fact that some clinicians doubt the evidence base. However the drugs recommended by NICE have been incorporated into the Risk Assessment Tool.

Particular Problems in the implementation and delivery of VTE prevention actions

Engagement and Leadership – Despite having strong executive and clinical leadership for this work, in some cases it has been difficult to engage champions within specialties to lead work there. Some clinicians doubt its evidence base, therefore hearts and minds are not behind this change.

Variation in Practice – Different clinicians may use different thromboprophylaxis regimens between directorates or even within directorates despite efforts to standardise practice.

Awareness – The 1000 Lives Plus Programme has achieved a lot to raise the awareness and visibility of the risks to patients of hospital acquired thrombosis. However, many clinicians may not fully understand the importance of prioritising risk assessment of patients.

Conclusions

Staff at Aneurin Bevan Health Board have worked hard to implement the recommendations of NICE CG92 and 1000 Lives Plus drivers for preventing hospital acquired thrombosis. Hospital acquired thrombosis is preventable in many cases therefore it is imperative that health boards provide reliable preventative care. In order to achieve this the health board sees the following as essential:

- Reliable risk assessment for venous thrombo-embolism
- Reliable treatment and management of patients identified as being at risk of HAT

- Ongoing measurement of processes for risk assessment and thromboprophylaxis
- Ongoing measurement of outcomes, more specifically a Hospital Acquired Thrombosis Rate split by specialty, divisional and organisational level
- Root Cause Analysis of each case of Hospital Acquired Thrombosis
- Prevention of HAT to be a national priority

Health and Social Care Committee
HSC(4)-15-12 paper 13
One-day inquiry into venous thrombo-embolism prevention – Evidence from Abertawe Bro Morgannwg University NHS Trust

Contribution to the National Assembly for Wales Health & Social Care Committee Inquiry into Venous Thrombo-Embolism Prevention in Hospitalised Patients in Wales (24th May 2012)

1. Background

The then Abertawe Bro Morgannwg University NHS Trust held the first meeting of its Thromboprophylaxis & Anticoagulation Committee on 12 January 2009. Terms of Reference were drawn up in line with the recommendations of Lifeblood the Thrombosis Charity (2008) booklet on setting up and running Thrombosis and Thromboprophylaxis Committees. The committee was initially chaired by the Associate Medical Director on behalf of the Medical Director. Since October 2010, the Medical Director has chaired the committee.

Following the publication of NICE Clinical Guideline 92 *Venous thromboembolism: Reducing the risk* in January 2010, the Thromboprophylaxis & Anticoagulation Committee's Terms of reference were amended to reflect the committee's role in implementing the guidance and monitoring compliance. The Committee also acted as the Project Board for the 1000 Lives HAT Mini Collaborative and continues to lead and monitor the improvement work around the prevention of hospital acquired thrombosis (HAT).

2. Outcome measure

The Health Board has adopted a process for measuring its monthly Hospital Acquired Thrombosis rate based on the methodology developed by Betsi Cadwallader ULHB. The ABMU methodology relies on Radiologists using a specific code to denote positive VTE scans. The Radiology IT system is then linked to the patient information systems to flag up any VTE patients who have had a hospital admission in the previous 12 weeks. The Health Board's HAT rate for February 2012 was 0.33 which represents 23 patients. This rate is an underestimate as it does not include patients who develop a VTE during the same admission. Work is underway to include patients who develop a VTE $\geq$48hrs post admission to hospital which will give a more comprehensive view.

In future when a patient is identified as having acquired a DVT/PE as a consequence of their hospital stay this will be recorded as an incident and investigated as part of the Health Board's risk management processes.

3. Implementation of NICE Guidance/Implementation of 1000 Lives Plus Risk Assessment Tools

AMBU set up a multidisciplinary HAT Team to link in with the 1000 Lives HAT Mini collaborative. The team comprised of an Anticoagulation Nurse, Surgical Nurse Practitioner, Clinical Pharmacists covering Acute Admissions and surgical specialties supported by a senior manager who is a member of the Medical Director's team.

The 1000 Lives Collaborative developed five separate risk assessment tools including separate tools for Acute Medical, Acute Surgical and Acute Trauma & Orthopaedics admissions. Following testing (Plan Do Study Act cycles) a single Acute Admissions tool was developed for use across ABMU. This was adopted alongside the Elective Surgical and Elective Orthopaedics tools. Both elective tools were tested locally and amended to better fit with the Health Board's Pre assessment arrangements.

Improvement methodology was employed to test, implement and spread the risk assessment tools through the organisation. There have been some notable successes, in particular in pre-assessment of elective patients in orthopaedic and general surgery where we have demonstrated that 100% of patients have been risk assessed for HAT as part of the pre assessment process since January 2011. . Data collection to assess the level of compliance in other elective surgery areas is being rolled out.

Implementation in the majority of "Medical" areas has been a challenge. Where it has been possible to incorporate the risk assessment tool into existing documentation, compliance has been better. A shortened Risk Assessment on the drug chart is being piloted at present in Medical Admissions areas. This will be supported by the Risk Assessment Tool being available for doctors to reference as they make their assessment. Methods of providing the reference material are being explored.

TRAINING In ABMU clinical staff are given teaching and training in thromboprophylaxis from pre registration to consultant level by the anticoagulation CNS & Pharmacist. Pre registration med student are required to complete and pass the e-VTE module prior to commencement as an FP1. Such training should be implemented in to doctor and nurse training programmes

4. Effectiveness and utilisation of pharmacological and mechanical prophylaxis for VTE

The current situation in ABMU HB with regard to mechanical thromboprophylaxis is as follows:

Compression pumps are regularly used in orthopaedic surgery and occasionally used in general surgery depending on the type of surgery and the preference of the surgeon.

Anti-embolism stockings are used throughout the HB with varying degrees of training given to clinical staff. A review of training needs is currently underway.

Mechanical devices are generally given in conjunction with pharmacological prophylaxis in the surgical arena. Mechanical devices, usually anti embolism stockings may be used in medical patients when pharmacological prophylaxis is contra indicated

In medical patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological treatment is required, enoxaparin (a low molecular weight heparin) is initiated at appropriate dose and reviewed following any clinical changes to the patient.

In general surgery patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological prophylaxis is required, a course of enoxaparin is prescribed at appropriate dose.

In orthopaedic surgery patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological prophylaxis is required, a course of either dabigatran or rivaroxaban (for hip and knee replacement surgery in line with NICE Technology appraisals 157 & 170) or enoxaparin is prescribed.

Implementation of NICE guidance

Implementation has varied across the specialities. This paper will report on each Clinical Programme Group (CPG) and then move to more general issues. DVT risk assessment form completion, the prescription and use of appropriate thromboprophylaxis is assessed in BCU monthly as a rolling audit of a random sample of 50 random case notes.

General Surgery: A risk assessment has been in use within this specialty for several years. The All Wales Risk Assessment has been modified to include an assessment for bleeding risk, with excellent compliance. Patients are offered both pharmacological and mechanical thromboprophylaxis. Within BCUHB Clexane (a type of Heparin) is the pharmacological thromboprophylaxis used. Anti-embolic stockings are currently prescribed for all patients unless contraindicated. Patient information is provided to all patients both verbally and in written form. Stockings are changed every three days to increase their effectiveness. We do not currently reassess after 48 hours, but this is currently being reviewed. Intermittent pneumatic compression pumps are available on the surgical floor for those high risk patients for whom pharmacological thromboprophylaxis is contraindicated. A report, with supporting data is currently being drafted assessing the benefits to extended thromboprophylaxis in major abdominal and pelvic surgery for cancer, and will hopefully be implemented within the near future.

Orthopaedics: Within Nice guidelines all patients are offered both pharmacological and mechanical thromboprophylaxis on admission. As for general surgery patient information concerning anti embolic stockings is available in written form. Intermittent pneumatic compression pumps and foot pumps are regularly used for patients undergoing lower limb surgery. Consistent with NICE guidance, following Hip surgery patients are discharged on extended thromboprophylaxis for 28 days and after knee surgery, two weeks. Work is currently underway, but in the very early stages, to implement the All Wales risk assessment tool. More recently we have progressed to administering thromboprophylaxis to high risk patients, under specific consultants, being managed with a lower limb plaster of Paris.

Gynaecology: Unless contraindicated patients are offered both pharmacological and mechanical forms of thromboprophylaxis. Written information is available concerning the anti-embolic stockings. Cancer patients who had had surgery are sent home on extended thromboprophylaxis for 28 days.

General Medicine: Work within this area has been slow yet steady; this being the area where our team have encountered the greatest difficulty in securing improvement. DVT risk assessment is integrated into the clerking proforma. Unless contraindicated patients are prescribed pharmacological methods of thromboprophylaxis. Mechanical thromboprophylaxis is not currently used. In 2008 – 2009 our Acute Medical Unit (AMU) had a thromboprophylaxis prescription rate of 20 – 30%. With the investment of education and working closely with staff this has increased to 95%. Completion of DVT risk assessment remains low at 45%.

Maternity: at present we are implementing the All Wales Risk Assessments tool in our 3 maternity units. In addition we are looking to develop a compliance tool which will capture data on DVT risk assessment. Building on other work within BCU, the team is developing a hospital acquired thrombosis rate for maternity across the three sites. Unless contraindicated all patients undergoing caesarean section delivery are prescribed clexane for 5 days post procedure. Other high risk patients receive the same for up to six weeks post-partum.

A staff education programme is in place at one of the sites, and will be extended to cover all. A patient information leaflet has been successfully piloted which is distributed to all patients, on one of the other sites. Once printed this will be made available in the other two units.

Implementation of the 1000 Lives Plus risk assessment

The implementation and usage of this risk assessment tool across BCUHB has been limited in some specialities like Orthopaedics, where as in others compliance has been excellent with evidence of sustained usage.

As part of the development work to roll out the All Wales Risk assessment across BCUHB a steering group has been set up and has been running now for over 18 months with a multidisciplinary membership from across the board. In two of the three District General Hospitals there are established locality groups with the responsibility to roll out the work to their local teams. These are best placed to deal with local issues and will escalate, where appropriate issues of significance to the main steering group. Each group regularly reviews compliance data for risk assessment and the outcome rates for Hospital acquired thrombosis.

Within Glan Clwyd and Bangor where locality teams have been established, these have demonstrated excellent multidisciplinary working. In Glan Clwyd this is chaired by an Orthopaedic surgeon; in Bangor by a Haematology Consultant. Both are supported by clinicians from other specialities. Having regular outcome data has enabled the team to target Specialities with the highest Rates of Hospital acquired thrombosis and the lowest compliance with risk assessment rates.

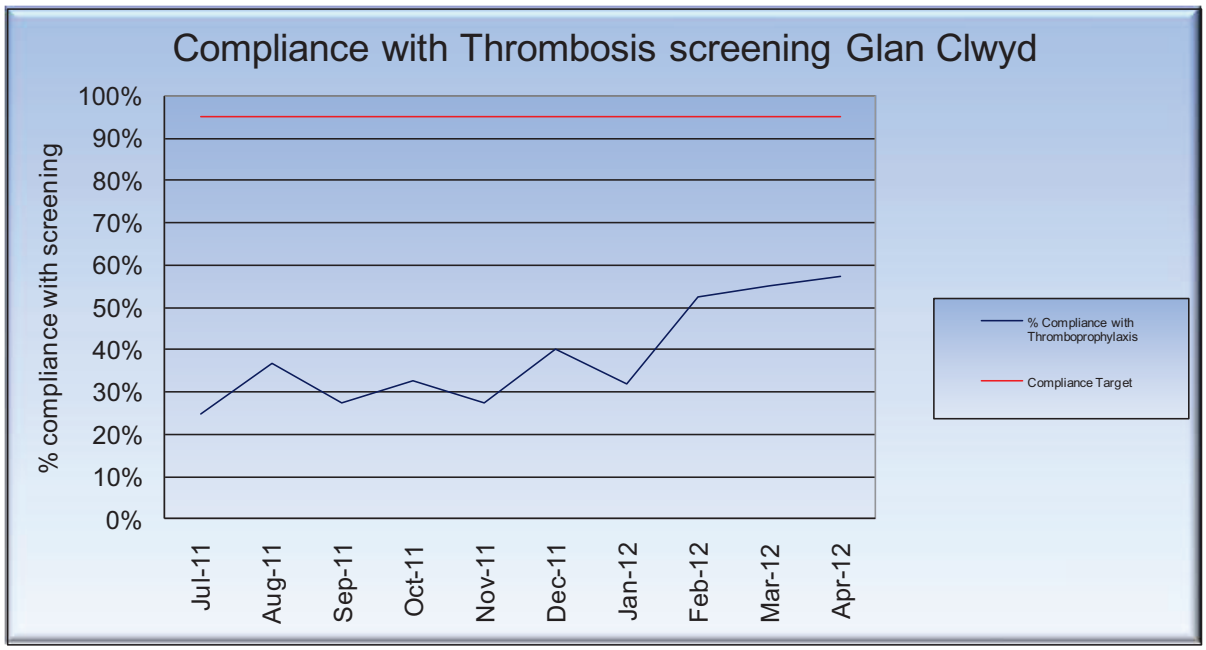
In General Surgery the CPG have now incorporated the risk assessment tool in to their new clerking proforma. This clerking proforma is now in the process of being rolled out across the health board. Before it was introduced in General Surgery at Glan Clwyd, compliance was in the region 50%. Between January and March 2012, with excellent clinical engagement and a ‘must do’ approach, this has risen to, and become consistent at 100%.The BCUHB All Wales risk assessment tools has now been approved and awaiting role out in the following new areas:

- Non ambulatory Medical Patients
- Elective Orthopaedic
- Emergency Orthopaedic
- Maternity

Like General Surgery, Urology has started to incorporate the All Wales risk assessment tool within their clerking proforma. Once finalised and printed they will be used across the whole of BCUHB.

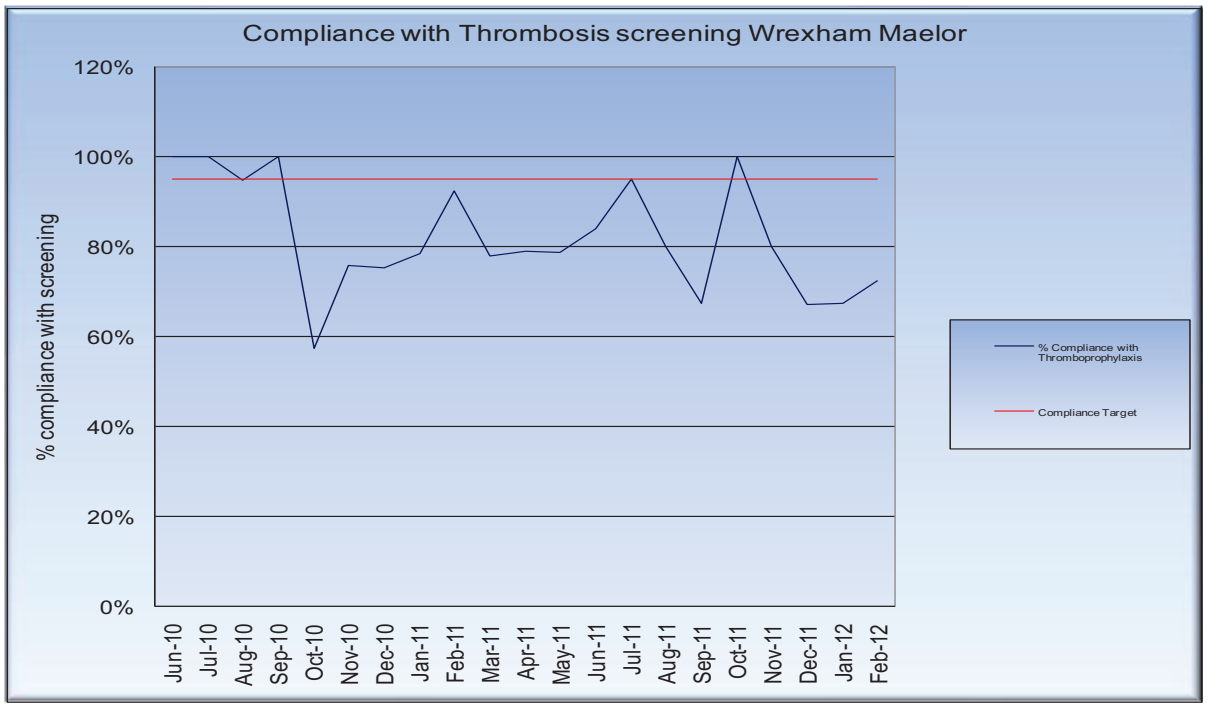
BCUHB Friday, 04 May 2012

Gynaecology is in the very early stages of implementation. The risk assessments have been amended slightly and the all wales maternity risk assessment has been incorporated. Assuming approval it is anticipated it will be implemented at Glan Clwyd on the 1st June, and thereafter to other two sites.



In Wrexham all elective Surgical and Orthopaedic patients are now risk assessed in Pre-operative assessment clinic by a pharmacist achieving a compliance of more than 95%. However, for the rest of the hospital population, a compliance of 73% shows room for improvement. In medicine data collection relies on ward staff and is supplied sporadically. Once again this is an area for further

attention and work.



In summary Current compliance rates for BCUHB are as follows for February 2012:

- Bangor: 33%
- Glan Clwyd: 53%
- Wrexham Maelor: 73%
- **BCUHB compliance with risk assessment= 53%**

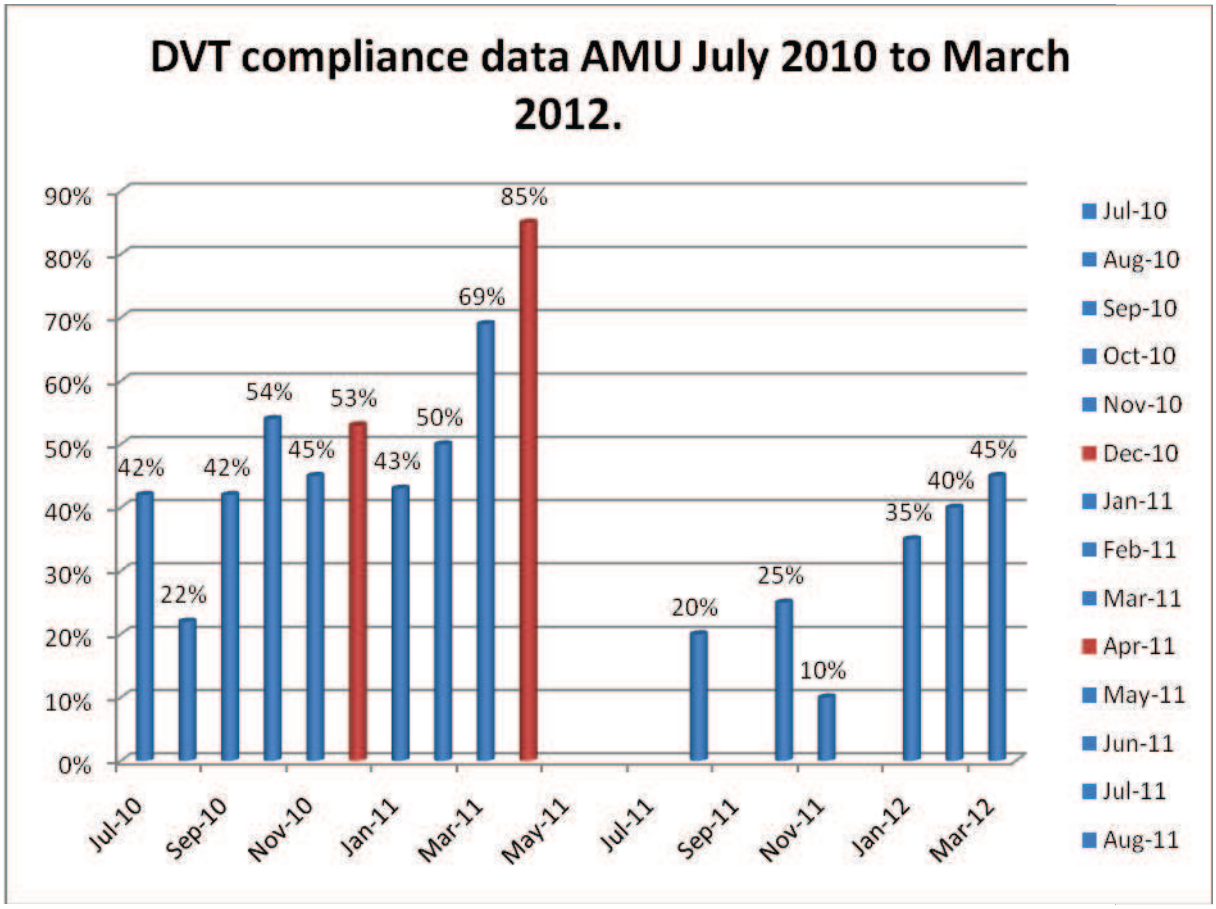
Effectiveness and utilisation of pharmacological and mechanical prophylaxis for VTE

We have observed a difference in compliance in use of the assessment tools and the numbers receiving some form of prophylaxis. Across BCU 80 – 95% of patients receive some form of either mechanical or pharmacological thromboprophylaxis. We are currently performing a retrospective case note audit of all the patients with hospital acquired thrombosis for 2011 to look at the prophylaxis they received.

Particular problems in the implementation and delivery of VTE prevention actions

- ***Day to Day Leadership***

Using commercial sponsorship, BCU have employed a part-time thromboprophylaxis Nurse to assist with this work. With a package of focussed training and support the risk assessment completion rate in one of our AMU increased from 22 to 85% at the beginning of 2011. Unfortunately funding difficulties meant the post ceased to exist in April 2011. This was subsequently reinstated, with further temporary funding. Much of the ground gained was lost and we are still in the process of recovery. Funding runs out this month, with no prospect of further commercial sponsorship. Nevertheless, BCU, recognising its evident value are exploring alternatives, and it would appear likely, though not as yet certain, this will be extended for a further year.



- ***Clinical Engagement*** –
  In general, medical staff do not see this as a priority issue. Nevertheless, developing and providing outcome data has proven of great help.

- ***Consultant Leadership*-**.
  This would appear key. Our success within General Surgery on one of our DGH sites has in no small part been attributable to the leadership and support of an enthusiastic Consultant 'champion'. This individual is also the clinical lead for the Hospital Acquired Thrombosis Collaborative.

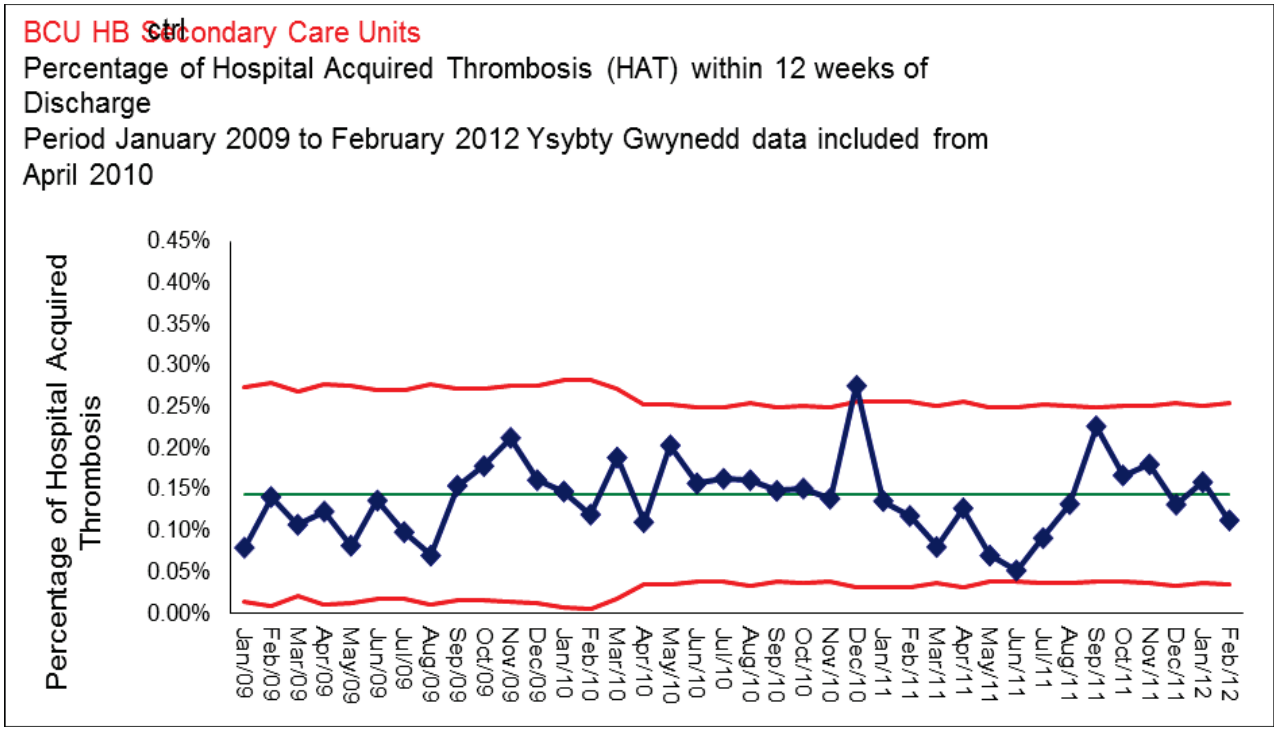
- ***Time to train –***
  Already heavily subscribed it has been difficult to convince postgraduate departments to give time to training in this area. Were this provided at induction, its anticipated this would produce an improvement in use of the assessment tool and prescription of appropriate prophylaxis. With increasing availability of HAT rate and the effect we have noted in general surgery, this should improve.

Hospital acquired thrombosis rate :

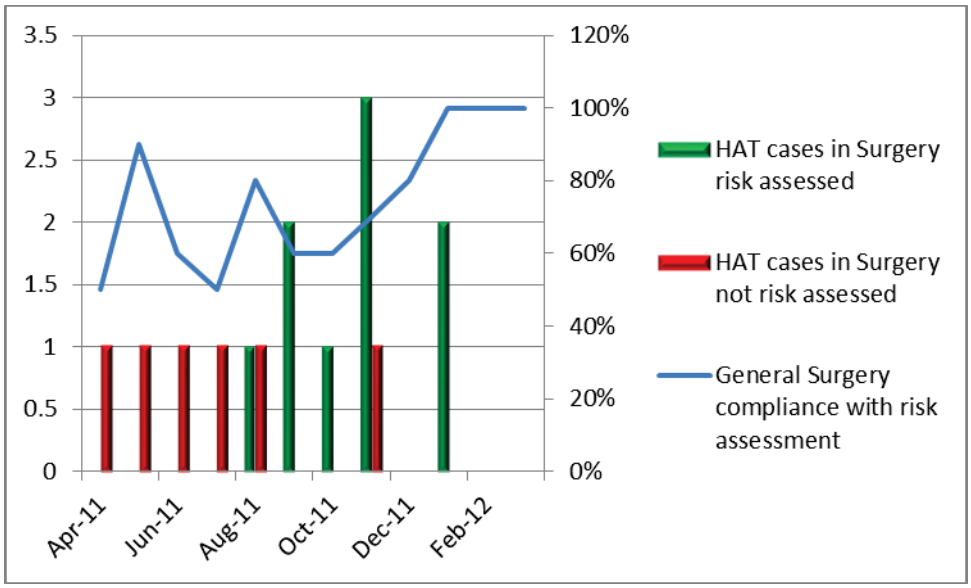
We have determined across BCU, for all Specialities and all methods of admission, there are between 5 and 23 cases per month . From this we have determined a rate using the formula:-

Number of Hospital acquired thrombosis x 100= HAT rate

Number of discharges for the month



Prior to the introduction of this outcome measure, as the majority of HAT is managed in primary care or out-patients, there was limited feedback on HAT. Clinicians were aware of guidance and the advice to provide prophylaxis, but had little to indicate, for their patients, this was a problem meriting their attention. Identifying actual numbers; determining a rate; and bringing this to departmental level has proven a spur to action. The best evidence for this has been in General surgery as below:-



This is early data, in one specialty, on one site, but provides for the first time a link between risk assessment and incidence of HAT.

GIG CYMRU NHS WALES
Bwrdd Iechyd Cwm Taf Health Board

Your ref/eich cyf: AW/JT
Our ref/ein cyf:
Date/Dyddiad: 03/05/12
Tel/ffôn: 01443 744803
Fax/ffacs: 01443 744888
Email/ebost: Allison.williams4@wales.nhs.uk
Dept/adran:

Mark Drakeford AC/ AM
Chair
Health & Social Care Committee
National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

Dear Mr. Drakeford,

Re: Venous thrombo-embolism prevention in hospitalised patients in Wales.

Thank you for the letter dated 13th March 2012 requesting submissions to the Health & Social Care Committee. Please accept the following information from Cwm Taf Local Health Board.

- There is Executive leadership across Cwm Taf Health Board on the initiatives to reduce the incidence of hospital acquired venous thrombo-embolism. Direction and scrutiny on the implementation of the National Institute for Clinical Excellence (NICE) guidance and the application of the 1,000 Lives Plus risk assessment tool is through the Thrombosis Committee, which is Chaired by the Assistant Medical Director. There is extensive engagement from the Directorates to ensure a collaborative approach to implementation and sharing of audit outcomes for learning across the organisation, with the approach endorsed by the Thrombosis Committee in October 2010.
- Awareness of the risk assessment tool and prevention actions is raised in the induction programmes for all junior doctors and at both the audit meetings and the Integrated Governance meetings in the Directorates. During 2011 awareness raising Directorate sessions have been held to assess the quality standards for the prevention of venous thrombo-embolism.
- There has been extensive audit activity across all relevant Directorates to assess compliance with NICE Clinical Guidance 92 - Venous Thromboembolism : reducing the risk, and NICE Clinical Guidance 46 - VTE in Inpatients undergoing surgery. The outcomes of the audits demonstrate a good awareness of the need to apply the prevention actions but there are opportunities to improve the documentation and record keeping. For example, following

assessment of the patient where the balance of risk demonstrates a risk of bleeding for the patient, the entry in the medical record is not always completed to indicate that an active decision has been taken NOT to instigate pharmacological prophylaxis.

- Audit outcomes demonstrated greater compliance in surgical/orthopaedic/anaesthetics/ENT and obstetric & gynaecology specialities. The roll out of Post - Operative instructions for the application of mechanical prophylaxis is underway with blanket application of TED stockings/calf pumps in some specialities where the risk of VTE is high - trauma/orthopaedics. Audits continue on utilisation and effectiveness of Rivoroxiban, Enoxaprin, Clexane and mechanical prophylaxis.
- Patient information leaflets have been developed and with the roll out of Pre-Operative Assessment patients are being advised of the self care they can engage in during a hospital stay - passive exercise etc. The detailed pre-disposing history is being documented at the pre-operative stage and recorded on the pre-admission check list. In some specialities the Clinical Nurse Specialists and Nurse Practitioners are completing further checks at admission utilising the 1,000 Lives Plus audit tool - this approach is subject to audit to assess the best mechanism to improve compliance across Cwm Taf Health Board.
- To support self care and full engagement by patients and carers in the VTE prevention actions consideration is being given to developing a 'care contract' to be provided at admission which describes the actions patients should take to reduce the risk of development of VTE. The 'care contract' will also contain information for patients on infection prevention & control approaches and general public health information to support a rapid return to normal health.
- Information Technology and Radiological reporting systems are being aligned to provide evidence for the HAT rate. Development of outcome measures to compare incidence prior to and following implementation of thromboprophylaxis is underway and Cwm Taf Health Board is committed to full engagement with the achievement of a National HAT rate.

I do hope the information from Cwm Taf Health Board is useful in the submission to the Health & Social Care Committee.

Yours sincerely,

Allison Williams,
Chief Executive Officer

cc Felicity Barclay, NHS Institute for Innovation & Improvement.
cc Grant Robinson, Medical Director, Aneurin Bevan Health Board

Health and Social Care Committee
HSC(4)-15-12 paper 16
One-day inquiry into venous thrombo-embolism prevention – Evidence from Cardiff and Vale University Health Board

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Ysbyty'r Eglwys Newydd
Whitchurch Hospital
UHB Headquarters
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Heol Parc, Yr Eglwys Newydd Caerdydd, CF14 7XB

Eich cyf/Your ref: GS//CJ
Ein cyf/Our ref:RW/JP/
Welsh Health Telephone Network:
Direct Line/Llinell uniongyrchol:

☎ (029) 2074 2130 (029) 20336048
e-mail : Medical.Director@wales.nhs.uk

4th May 2012

Mark Drakeford AM
Chair of the Health and Social Committee
C/o Committee Clerk,
Health and Social Care Committee,
National Assembly for Wales,
Cardiff Bay,
CF99 1NA

Dear Chair,

Re - Evidence on behalf of Cardiff and Vale UHB for the Health and Social Care Committee – Venous thrombo-embolism (VTE) prevention in hospitalised patients in Wales.

Thank you for inviting evidence on behalf of Cardiff and Vale UHB on this important subject. This has been prepared on behalf of the UHB with written advice from Dr Rachel Rayment (Consultant Haematologist), Vice Chair of the Thrombosis and Anticoagulation Group and Dr Graham Shortland (Executive Medical Director) Chair of the Thrombosis and Anticoagulation Group. Both of us would be agreeable to the presentation of oral evidence.

In 2008 Cardiff and Vale Trust set up a Thrombosis Committee. This was a group of interested clinicians, pharmacists and nurses who were committed to improving the practice across the Trust. The Trust published a thromboprophylaxis policy, demonstrating its commitment to thrombosis prevention at board level. Senior clinicians taught medical students, foundation doctors, and core trainees about the importance of

thromboprophylaxis. The policy was launched, along with standardised risk assessment tools for medicine, surgery and obstetrics, with departmental presentations and a Grand Round presentation.

In 2009 the All Wales Medical Directors Group tasked Dr Simon Noble to chair an All-Wales thromboprophylaxis group, at which Cardiff and Vale were represented by a senior clinician and a pharmacist, to develop an All-Wales risk assessment tool, which was ultimately badged by 1000 lives plus campaign, which had also launched a mini-collaborative to help organisations improve their rates of risk assessment. The risk assessment tools were launched in December 2009.

Simultaneously, in September 2009 the then medical director invited Dr Graham Shortland (then AMD for quality and innovation to chair a thrombosis and anticoagulation group, replacing the existing thrombosis committee), which reported to the Quality and Safety committee. This group was formed in line with guidance from “Lifeblood – The thrombosis charity” and tailored to local needs.

In January 2010 NICE CG92 was published which necessitated some change in the risk assessment tool, this was done locally at Cardiff and Vale UHB. The revised risk assessment tools were launched in the UHB in April 2010 for “general” surgery, obstetrics, elective hip and knee replacement surgery and other elective orthopaedic surgery. The tools were circulated from the Medical Director’s office to divisional directors and clinical directors. Grand round presentations were aimed at engaging senior clinicians and thromboprophylaxis discussed at induction of new junior medical staff.

The UHB has continued to participate in the 1000lives plus mini-collaborative, where there was sharing of approaches/difficulties with the other health boards in Wales. Clinical audits undertaken in 2011 have demonstrated variable success in the use the risk assessment tool with compliance at its

greatest in gynaecology (consistently >80%) and areas of much lower success.

In the past year the UHB has signed up to the maternity mini-collaborative run by 1000 lives plus. One of the issues addressed was VTE prevention (VTE being a leading cause of maternal death for many years). As a consequence, VTE risk assessment has been built into admission bundles for women being admitted to the assessment unit and has to be completed as a criterion for completion of the bundle as a whole. Adopting the PDSA approach has seen a change in the culture with regard to VTE risk assessment in this ward, which we are planning to take to the antenatal ward over the next few months. This initiative by 1000lives plus along with other initiatives from the 1000lives plus programme has helped in the development of tools and improvement methodology to assist in the implementation of NICE guidance. However whilst there are areas that have seen significant change and success, such as gynaecology and obstetrics in Cardiff and Vale UHB, full-scale systems change in our experience has not yet been achieved.

Prevention of hospital acquired thrombosis has been discussed at each division's quality and safety meetings, and it has been suggested that each division has a VTE prevention champion.

We have also tried to adopt a similar approach to that utilised in the hand-washing campaign (i.e. to raise patient awareness) by providing leaflets and providing information on the plasma screens in the hospital waiting areas and on the bedside Patientline screens. Despite these approaches progress continues to be difficult in raising awareness of the risk assessment tool and its use.

Work is under-way, to develop a robust method of measuring the hospital's rate of hospital acquired thrombosis (HAT). This approach needs further work and refinement before being sufficiently robust to publish and use to incentivise clinical staff. However we view this as an important initiative and

we would aim to have a HAT rate, which could be published on the UHB "safety dashboard" to help drive the quality and safety agenda, and assist teams who were caring for patients who subsequently developed HAT, so that they may undertake a root cause analysis on why it occurred. **This would allow feedback to the clinicians (who often do not see the patient when they develop this complication) and facilitate a change in practice.** We feel that this is a more useful approach than focussing solely on the rate of completion of risk assessment forms, a process measure.

This leads us to discuss how we might improve the success of implementation of NICE guidance;

> At present we understand each Health Board is working individually to develop their own HAT rate. The method for doing this should be standardised so that Wales can produce a national HAT rate and also be able to compare outcomes between Health Boards and encourage improvement within organisations.
> Welsh Government should work with health boards in Wales to produce a HAT rate. This should include the use of such a rate in Welsh Government "Quality Frameworks" to better focus the issue of VTE prevention, to drive change from a "Board to Ward" level.
> We acknowledge that the development of such a HAT rate is not easy but once again we believe that this would improve implementation of the NICE guidance. Radiology departments would need to provide standard codes for positive and negative scan (Doppler and V/Q scan) results to help in this process.

We believe that with a greater focus on the development of outcomes would improve the success of implementation of the NICE guidance. A great deal of success has been achieved with Health Care Associated infection (HCAI) rates in Wales, particularly Clostridium Difficile. There is a need to develop similar levels of awareness and measurements throughout the Healthcare

Community (from Welsh Government to ward level) of VTE prevention to that which has been achieved with HCAI.

Dr Graham Shortland BM, DCH, FRCPCH.
Medical Director Cardiff and Vale UHB

Hywel Dda Local Health Board, response to the National Assembly for Wales Health and Social Care Committee One Day Inquiry into venous thrombo-embolism (VTE) prevention in hospitalised patients in Wales.

Purpose of Paper

This paper provides evidence to the Health & Social Care Committee's One Day Inquiry into venous thrombo-embolism (VTE) prevention in hospitalised patients on the extent to which the guidance by the National Institute for Clinical Excellence (NICE) and the risk assessment tool by 1000 Lives Plus have been implemented by Hywel Dda Local Health Board (LHB).

Background

Hywel Dda LHB is at the heart of local healthcare for mid and south west Wales. The organisation, formed in 2009, is responsible for providing all the necessary healthcare services for Carmarthenshire, Ceredigion and Pembrokeshire and also improving the health and general wellbeing of its community. The organisation brings together community, primary and secondary care services for around 375,000 people across all their counties and beyond.

There are four acute hospitals:

- Bronglais General Hospital, Aberystwyth;
- Prince Philip Hospital, Llanelli;
- Glangwili General Hospital, Carmarthen;
- Withybush General Hospital, Haverfordwest.

Acute and community services are also provided by:

- 8 community hospitals;
- 15 health centres, and other accommodation.

Primary care services are provided mainly through contractors, including:

- 55 GP practices (main sites)
- 51 Dental Practices (67 dental contracts);
- 99 Community Pharmacies;
- 51 Optometric Practices

There are further numerous locations and settings providing Mental Health, Learning Disabilities, Rehabilitation, Psychotherapy and Neurophysiology services.

Introduction

Any VTE occurring within 90 days of a hospital admission is classed as a hospital-acquired VTE.

Hospital-acquired VTE, ranging from asymptomatic deep vein thrombosis (DVT) to massive pulmonary embolism (PE), is common during and after hospital admission and is considered a significant cause of morbidity and mortality in hospitalized patients. There could be an estimated 60,000 deaths due to pulmonary embolism (PE) in the UK, although the Office for National Statistics for England records the recognised figure on death certificates in 2010 as 6,000. It is recognised that death due to PE is under diagnosed and that for every case where PE is stated as a cause of death in hospital, there are usually another two patients where the diagnosis was missed. There were 284,000 hospital deaths in England and Wales in 2007, and the VITAE European study estimated that 12% of these deaths were due to PE. However post-mortem studies describe a falling incidence from around 10% of hospital deaths around 1980 to around 2% in more recent studies. Of course the use of primary thromboprophylaxis will have impacted on this decline, change in practice means patients mobilise quickly and will be sent home earlier, and that most PE deaths will occur after discharge.

It is estimated that two thirds of PE are hospital-acquired and that 70% of deaths occur in medical rather than surgical patients. The risk of VTE in medical admissions varies from 15% in general medical patients to 50% in stroke patients, while clinically recognised PE occurs in 1% of general medical patients.

It is also recognised that the risk of VTE exists for up to 90 days after admission, and that many VTE occur post discharge. Furthermore VTE is often clinically silent, for 80% of DVT have no clinical signs and yet can result in long term sequelae of the post thrombotic syndrome.

Implementation of NICE guidance

Policies and protocols for the prevention of venous thrombo-embolism in both surgical and medical in-patients, were in place in the constituent NHS Trusts of the Hywel Dda LHB, for a number of years prior to the publication of the NICE guidance.

In April 2007, NICE published Clinical Guideline (CG) 46 ‘Reducing the risk of venous thrombo-embolism in in-patients undergoing surgery’. This guidance was updated and replaced in January 2010 by CG92 ‘Reducing the risk of venous thrombo-embolism (deep vein thrombosis and pulmonary embolism) in patients admitted to hospital.

Following the publication of CG 46, an audit programme was initiated to monitor and facilitate its implementation within the surgical specialties.

In July 2009, the Hywel Dda Thrombosis Committee (which reports to the Medicine Management Group) held its inaugural meeting. The overall purpose of the Thrombosis Committee is 'to develop and oversee the implementation of guidelines for prevention and management of thrombo-embolism across Hywel Dda Local Health Board'.

In December 2009, the All Wales Thrombosis Group launched the All Wales Thromboprophylaxis Risk Assessment Tool which following review and inclusion of a limited number of drug options by the Hywel Dda Thrombosis Committee was adopted within Hywel Dda LHB, initially within surgical pre-assessment clinics. However, further discussion across Hywel Dda LHB was required to move towards a consistent approach in the product prescribed for low molecular weight Heparin and this was referred to the Medicine Management Group. This delayed the roll out of the All Wales Thromboprophylaxis Risk Assessment tools across all relevant specialties.

An Audit undertaken in Prince Philip Hospital (PPH) in 2005 identified that approximately 40% of patients received prophylaxis. And a further audit in 2010 identified that approximately 46% of patients received prophylaxis.

Implementation of the 1000 Lives Plus VTE Risk Assessment Tools
Following the launch of the 1000 Lives Plus Programme area 'Reducing Harm from Hospital Acquired Thrombosis' (HAT) in May 2010, the implementation of HAT became an organizational priority for Hywel Dda LHB as demonstrated by the appointment of an executive lead for HAT. In order to progress the HAT collaborative a Hywel Dda HAT Implementation Group was established which enabled a more focused approach to progressing the various elements in support of the successful implementation of HAT across the 4 District Hospitals, within all specialties.

VTE Risk Assessment Tool: the VTE Risk Assessment Forms were 'localised' for use across Hywel Dda LHB, including achievement of consistent approach to the prescribing of low molecular weight Heparin, therefore harmonizing practice across Hywel Dda LHB.

Launch of 1000 Lives Plus HAT
On the 17th October 2011 following awareness raising through a variety of means such as letter by Medical Director, notification via Global Email, introduction at Grand Round, the VTE Risk Assessment forms were launched in the acute hospitals for all specialties.

Audit
See Effectiveness & utilisation of pharmacological & Mechanical prophylaxis for VTE.

Given the progress made, the Hywel Dda HAT Implementation Group has now been disbanded to be replaced by 4 hospital based HAT Implementation Groups, which will engender greater local ownership of the continued implementation of HAT across the 4 District Hospitals. These 4 Hospital HAT Implementation Groups will report directly to the County Quality & Safety Committees in line with the other 1000 Lives Plus Collaboratives as well as to the Hywel Dda Thrombosis Committee.

The Hywel Dda Thrombosis Committee fulfils the role of HAT Steering Group and will support the implementation of HAT within each of the District Hospitals by addressing organisation wide issues such as development of Thrombosis Policy, education of medical staff, monitoring/performance management including the development of process for the calculation of a reliable VTR rate and management operational systems, patient information leaflets and future spread of HAT prevention into the Community Hospitals.

Thrombosis Policy

All thrombosis related guidance, protocols, and policies currently in place within Hywel Dda LHB have been collated and reviewed by the Hywel Dda Thrombosis Committee. An overarching Thrombosis Policy will be drafted which will 'house' all the relevant guidance, protocols, policies.

An Anti-Embolic Stocking (AES) Policy has been approved which ensures a consistent approach to the care of all patients admitted to hospital that have been prescribed AES and in line with the 1000 Lives Plus HAT Programme.

Education of Medical Staff:

Clinical Leads and Consultant Haematologists in each area have provided education to clinicians on the introduction and completion of the VTE Risk Assessment forms. In addition, they have also attended Senior Nurse Meetings and met with Anaesthetic and Orthopaedic Teams to promote the importance of the prevention of HAT and completion of the VTE Risk Assessment forms. Furthermore, the Quality Improvement Managers within each of the district hospitals and the Clinical Nurse Leads undertake spot checks of compliance on the wards and reinforce the need for VTE Risk Assessment forms to be completed.

To improve compliance, VTE Risk Assessment forms are kept with the drug chart at the bottom of the patient's bed and it is intended that Consultants will reinforce the need for a VTE risk assessment on the post take ward round.

Presentation of audit results on the compliance with VTE risk assessments at the Whole Hospital Clinical Audit Meetings, contribute to medical staff learning and contribute to ongoing awareness for the requirement of VTE risk assessments to be undertaken.

It is recognized that formal ongoing education with regard to preventing venous thrombo-embolism (VTE) in hospitalised patients is required given the four monthly rotations of Junior Doctors; the clinical leads and consultant haematologists will address this through using the teaching slots at the Junior Doctors Induction.

Monitoring/Performance Management/VTE rate:
The 1000 Lives Plus HAT programme stipulates that 'the number of VTE risk assessment forms completed' is the only compulsory outcome measure required. Although, in addition there are the following 1000 Lives Plus Process Measures:

- % of all adult in-patients who have had a HAT risk Assessment on admission to hospital using a national tool.
- % receiving appropriate HAT prophylaxis: % of in-patients receiving the prophylaxis identified by their risk Assessment.
- % of in-patients whose risk Assessment is reviewed and documented at 48 hours.
- % of patients who have been in hospital in the last 3 months who developed a DVT or PE (VTE rate)

Monitoring/Performance Management processes are required to be put in place for the data collection and subsequent performance reporting of the outcome/process measures, particularly the VTR rate for Hywel Dda LHB.

Work has commenced on developing a process to establish the VTR rate based around the 'How to guidance' from Mel Baker. After discussions with the Radiology and Information Departments it was highlighted that the use of Pathology codes would make this process more straightforward and these have been introduced from 01/02/2012. The first 3 months worth of data is currently being quality assured, with a view to report Hywel Dda's VTE rate in the near future.

Patient Information Leaflets:
Patient information leaflets provided by EIDO Healthcare are given to patients in pre-assessment clinic and for any patients requiring additional information, the NICE guidelines are available.

Patient information is also provided in line with the AES policy.

Effectiveness & utilisation of pharmacological & Mechanical prophylaxis for VTE
An Audit of the use of VTE Risk Assessment forms and whether VTE thrombophylaxis was prescribed in admitted medical patients at AMAU/CDU at Prince Phillip Hospital (PPH) in November 2011 demonstrated an increase in

patients receiving appropriate prophylaxis. The audit found that 61% of medical patients received prophylaxis; however only 32% of patients admitted had a VTE Risk Assessment form completed. The recommendations from the initial audit therefore included:

- All admissions should have a documented risk assessment using the thromboprophylaxis form.
- All patients who are risk assessed as requiring Clexane should have it prescribed.
- Patients with deranged renal function should have their EGFR checked and Clexane dose adjusted appropriately.
- Patient weight should be documented on the VTE Risk Assessment form.
- The VTE Risk Assessment form should be kept with the drug chart and reviewed every 48 hours.

Comparison with previous audits does show that with the introduction of VTE Risk Assessment forms more medical patients received appropriate prophylaxis.

- 2005: 40% appropriately received prophylaxis
- 2010: 46% appropriately received prophylaxis
- 2011: 61% appropriately received prophylaxis

A re-audit at Prince Phillip Hospital will occur in the week starting 30/04/2012.

At Glangwili General Hospital the audit is being performed on 9 medical wards, over 9 different days during the month of May. The audit involves confirming whether a VTE risk assessment has occurred including the use of the VTE Risk Assessment form, whether appropriate VTE thrombophylaxis has been prescribed and if not prescribed whether this has clearly been documented with the medical notes.

The implementation of the VTE Risk Assessment forms for Acute Medical Admissions was monitored during September and October in Bronglais General Hospital. During October 14 out of 15 (93%) patients had a VTE Risk Assessment form included in their medical notes. 13% of VTE Risk Assessment forms were completed correctly and 93% of patients received thromboprophylaxis. It was recommended for this compliance data to be shared with leads for the 1000 Lives Plus HAT collaborative for review and improvement in completing and evidencing the VTE risk assessment process is robust. During the month of January 2012 , a sample of all admissions were audited Bronglais General Hospital. The results of this audit will be presented on the 10th May at the Bronglais Hospital Whole Hospital Audit.

In addition, audit of surgical / orthopaedic practice needs to be established in order to have a complete picture of implementation across all specialties across all the hospitals.

Particular problems in the implementation and delivery of VTE prevention actions

Whilst Nursing staff can facilitate through promoting and reminding the completion of the VTE Risk Assessment forms, the responsibility for the assessment of patients and completion of the VTE Risk Assessment forms lies with Medical staff. Due to the turnover of Junior Medical staff there is a requirement for ongoing education in order to increase the reliability of the completion of the VTE Risk Assessment forms but more importantly the timely provision of the appropriate thromboprophylaxis for patients.

The key nursing role is to facilitate the measurement, supply, application and subsequent in-hospital and home-based care of the appropriate size mechanical thromboprophylaxis i.e. the Anti Embolic Stockings (AES). Nursing staff also provide patient information and administer the prescribed low molecular weight Heparin and finally, ensure patients understand the regime they are undergoing for VTE prevention and why.

Conclusion

Hywel Dda LHB has taken positive steps towards reducing the risk of in-patients acquiring a venous thrombo-embolism and therefore reducing the harm to which patients may be exposed, reducing the variation of service delivery and clinical outcomes and reducing the waste through the avoidance of patients developing complications. This has enhanced the quality of the health care provided and patient safety.

However, Hywel Dda LHB has a number of areas to further progress in order to fully embed the VTE risk assessment process and achieve full compliance with the recommended prophylactic regime into the daily practice of all its staff in all clinical areas across the HB.

Kathryn Davies
Director of Therapies and Health Science
Hywel Dda Health Board

Health and Social Care Committee
HSC(4)-15-12 paper 18
One-day inquiry into venous thrombo-embolism prevention – Evidence from Welsh Government

1. This paper provides evidence for the Health and Social Care Committee's one-day inquiry into venous thromboembolism (VTE) prevention in hospitalised patients in Wales.

2. The evidence paper:

   - summarises all guidance from the National Institute for Health and Clinical Excellence (NICE) in relation to the prevention of VTE.
   - examines the implementation of the NICE guidance;
   - examines the 1000 Lives Plus risk assessment tool across Wales and its adequacy and effectiveness in preventing VTE in hospitalised patients.

Summary

3. There is considerable published evidence on the actions needed to prevent hospital acquired VTE. This includes systematic assessment of at risk patients, prophylactic treatment where required, as well as patient involvement and education. The NHS in Wales, with the support of the 1000 Lives Plus programme has taken considerable steps to ensure the delivery of evidence-based care and improve patient safety. This has been challenging but remains a priority in our efforts to ensure the highest quality, safe care to hospitalised patients in Wales.

Venous Thromboembolism

4. VTE is a condition in which a blood clot (thrombus) forms in a vein. It most commonly occurs in the deep veins of the legs; this is called deep vein thrombosis. The thrombus may dislodge from its site of origin to travel in the blood – a phenomenon called embolism.

5. VTE encompasses a range of clinical presentations. Venous thrombosis is often asymptomatic; less frequently it causes pain and swelling in the leg. Part or all of the thrombus can come free and travel to the lung as a potentially fatal pulmonary embolism. Symptomatic venous thrombosis carries a considerable burden of morbidity, including long-term morbidity because of chronic venous insufficiency. This in turn can cause venous ulceration and development of a post-thrombotic limb (characterised by chronic pain, swelling and skin changes).

6. VTE is an important cause of death in hospital patients, and treatment of non-fatal symptomatic VTE and related long-term morbidities is associated with considerable cost to the health service.

7. The risk of developing VTE depends on the condition and/or procedure for which the patient is admitted and on any predisposing risk factors (such as age, obesity and concomitant conditions).

8. The House of Commons Health Committee reported in 2005 that an estimated 25,000 people in the UK die from preventable hospital-acquired VTE every year. This includes patients admitted to hospital for medical care and surgery. The inconsistent use of prophylactic measures for VTE in hospital patients has been widely reported. A UK survey suggested that 71% of patients assessed to be at medium or high risk of developing deep vein thrombosis did not receive any form of mechanical or pharmacological VTE prophylaxis.

NICE Clinical Guideline

9. In January 2010, NICE published a clinical guideline "Reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in patients admitted to hospital". The guideline updated and replaced earlier guidance published by NICE in 2007. All NHS organisations in Wales are expected to provide care in line with NICE guidance.

10. The guideline makes recommendations on assessing and reducing the risk of VTE in patients in hospital. It offers guidance on the most clinically and cost-effective measures for VTE prophylaxis in these patients.

11. The 'Key Priorities for Implementation' of the guideline is reproduced below:

"Assessing the risks of VTE and bleeding

- Assess all patients on admission to identify those who are at increased risk of VTE.

- Regard medical patients as being at increased risk of VTE if they:

  - have had or are expected to have significantly reduced mobility for 3 days or more **or**
  - are expected to have ongoing reduced mobility relative to their normal state and have one or more of the risk factors shown in box 1.

- Regard surgical patients and patients with trauma as being at increased risk of VTE if they meet one of the following criteria:

  - surgical procedure with a total anaesthetic and surgical time of more than 90 minutes, or 60 minutes if the surgery involves the pelvis or lower limb
  - acute surgical admission with inflammatory or intra-abdominal condition

- expected significant reduction in mobility
- one or more of the risk factors shown in box 1.

- Assess all patients for risk of bleeding before offering pharmacological VTE prophylaxis. Do not offer pharmacological VTE prophylaxis to patients with any of the risk factors for bleeding shown in box 2, unless the risk of VTE outweighs the risk of bleeding.

- Reassess patients' risks of bleeding and VTE within 24 hours of admission and whenever the clinical situation changes, to:

  - ensure that the methods of VTE prophylaxis being used are suitable
  - ensure that VTE prophylaxis is being used correctly
  - identify adverse events resulting from VTE prophylaxis.

Reducing the risk of VTE

- Encourage patients to mobilise as soon as possible.

- Offer pharmacological VTE prophylaxis to general medical patients assessed to be at increased risk of VTE. Choose any one of:

  - fondaparinux sodium
  - low molecular weight heparin (LMWH)
  - unfractionated heparin (UFH) (for patients with renal failure).

Start pharmacological VTE prophylaxis as soon as possible after risk assessment has been completed. Continue until the patient is no longer at increased risk of VTE.

Patient information and planning for discharge

- Before starting VTE prophylaxis, offer patients and/or their families or carers verbal and written information on:

  - the risks and possible consequences of VTE
  - the importance of VTE prophylaxis and its possible side effects
  - the correct use of VTE prophylaxis (for example, anti-embolism stockings, foot impulse or intermittent pneumatic compression devices)
  - how patients can reduce their risk of VTE (such as keeping well hydrated and, if possible, exercising and becoming more mobile).

- As part of the discharge plan, offer patients and/or their families or carers verbal and written information on:

  - the signs and symptoms of deep vein thrombosis and pulmonary embolism
  - the correct and recommended duration of use of VTE prophylaxis at home (if discharged with prophylaxis)
  - the importance of using VTE prophylaxis correctly and continuing treatment for the recommended duration (if discharged with prophylaxis)

- the signs and symptoms of adverse events related to VTE prophylaxis (if discharged with prophylaxis)
- the importance of seeking help and who to contact if they have any problems using the prophylaxis (if discharged with prophylaxis)
- the importance of seeking medical help and who to contact if deep vein thrombosis, pulmonary embolism or another adverse event is suspected.

Box 1 Risk factors for VTE

- Active cancer or cancer treatment
- Age over 60 years
- Critical care admission
- Dehydration
- Known thrombophilias
- Obesity (body mass index [BMI] over 30 kg/m^2)
- One or more significant medical comorbidities (for example: heart disease; metabolic, endocrine or respiratory pathologies; acute infectious diseases; inflammatory conditions)
- Personal history or first-degree relative with a history of VTE
- Use of hormone replacement therapy
- Use of oestrogen-containing contraceptive therapy
- Varicose veins with phlebitis

Box 2 Risk factors for bleeding

- Active bleeding
- Acquired bleeding disorders (such as acute liver failure)
- Concurrent use of anticoagulants known to increase the risk of bleeding (such as warfarin with international normalised ratio [INR] higher than 2)
- Lumbar puncture/epidural/spinal anaesthesia expected within the next 12 hours
- Lumbar puncture/epidural/spinal anaesthesia within the previous 4 hours
- Acute stroke
- Thrombocytopenia (platelets less than 75 x 10^9/l)
- Uncontrolled systolic hypertension (230/120 mmHg or higher)
- Untreated inherited bleeding disorders (such as haemophilia and von Willebrand's disease)

Other relevant NICE guidance

12. In addition to the Clinical Guideline, NICE has undertaken the following technology appraisals of medicines in connection with VTE:

Published

- Dabigatran etexilate, is recommended as an option for the primary prevention of venous thromboembolic events in adults who have undergone elective total hip replacement surgery or elective total knee replacement surgery. (TA157 published September 2008);

- Rivaroxaban is recommended as an option for the prevention of venous thromboembolism in adults having elective total hip replacement surgery or elective total knee replacement surgery (TA170 published April 2009);

- Apixaban is recommended as an option for the prevention of venous thromboembolism in adults after elective hip or knee replacement surgery (TA245 published January 2012).

The NHS in Wales is under a statutory duty to fund implementation of these medicines, in accordance with the NICE guidance.

In development

- Rivaroxaban for the treatment and secondary prevention of venous thromboembolism (Expected publication date July 2012);

- Dabigatran etexilate for the treatment of acute venous thromboembolic events (publication date to be confirmed);

- Apixaban for the prevention of venous thromboembolism in acute medical illness (publication date to be confirmed);

- Rivaroxaban for the prevention of venous thromboembolism in people hospitalised for acute medical conditions (publication date to be confirmed).

Quality Standard

NICE also published a VTE Prevention Quality Standard in 2010, which contained the following 7 Quality Statements:

No.	**Quality statements**
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.

A further Quality Standard "Management of venous thromboembolic diseases" is also in development with an anticipated publication date of April 2013.

Actions to prevent VTE for hospitalised patients in Wales

13. The NHS in Wales has been supported to take forward the actions required to help prevent hospital acquired VTE through the work of the former 1000 Lives Campaign and now the 1000 Lives Plus Programme, the national improvement programme for NHS Wales. The 1000 Lives work has introduced a standardised improvement methodology within NHS Wales to support the reliable and consistent implementation of evidence based interventions. Its aim is to facilitate the delivery of the highest quality and safest healthcare.

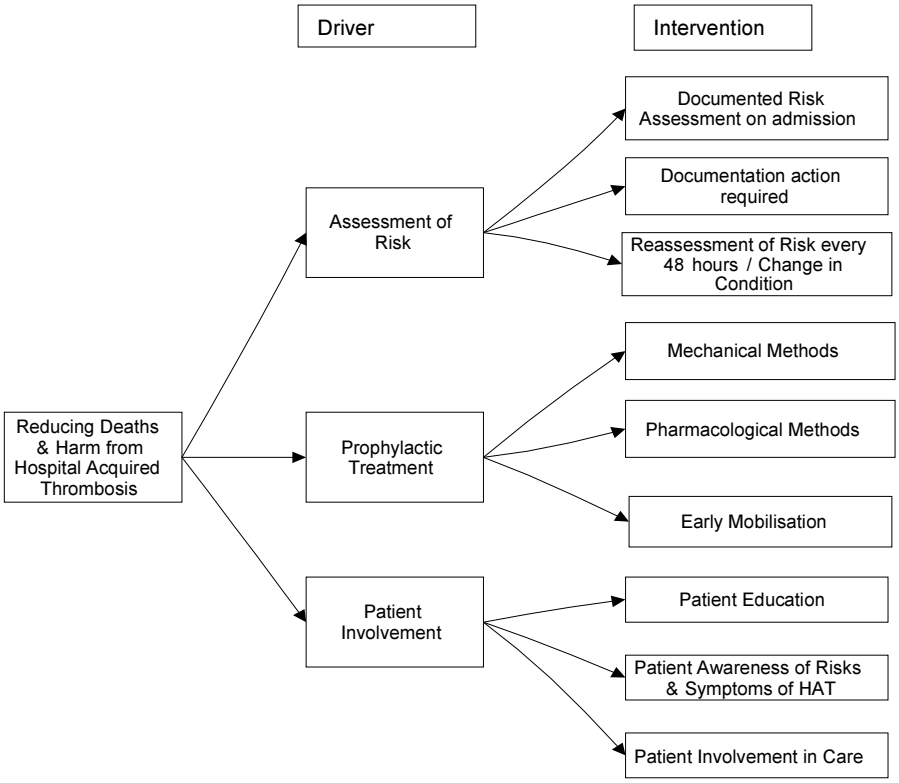
14. The 1000 Lives Campaign was launched in April 2008 with its aim of saving an additional 1000 lives and avoiding up to 50,000 episodes of harm in Welsh healthcare in two years. It included a small number of evidence- based content (clinical) areas, following an appraisal of evidence by the then National Public Health Service. This was based on international work previously designed and implemented by the Institute of Healthcare Improvement in the States. As a result the Welsh campaign included a content area for 'preventing and reducing surgical complications'. Within this one of the interventions included identifying patients at risk and then providing appropriate DVT prophylaxis.

15. The 1000 Lives Campaign produced resources and supported NHS organisations, through a collaborative programme to take forward implementation. At the time this way of working was new to NHS Wales, bringing together clinical teams from across Wales to share ideas, knowledge and challenges and develop methods to implement the various interventions needed, including the development of an all Wales risk assessment tool.

16. During the period of the 1000 Lives Campaign more evidence emerged and the NICE guidance was updated. Therefore in January 2010, following a review by the 1000 Lives Plus team of the evidence available by

regarding VTE and progress made by organisations, it was agreed with the then Chief Executive of NHS Wales to deliver a 12 month mini-collaborative specifically around VTE prevention as part of the new 1000 Lives Plus Programme.

17. The 1000 Lives Plus team worked in partnership with others, including Lifeblood, the thrombosis charity to develop a 'how to guide' and 'driver diagram' as set out below. This simple methodology sets out the various actions, including assessment, treatment and patient involvement, needing to be carried out in a systematic way for each at risk patient in order to try to prevent a hospital-acquired VTE.



18. This approach is underpinned by number of process measures to test reliability in implementing the interventions. With highly reliable processes, changes and improvements should then be seen when measuring outcomes.

19. 1000 Lives Plus continues to support NHS Wales organisations with this work and the many challenges that it has posed. In addition to implementation of the risk assessment work continues to ensure patients are re-assessed an ongoing basis and receive appropriate prophylaxis. For surgical patients this is now being taken forward through the Enhanced Recovery after Surgery Programme (ERAS).

20. The 1000 Lives Plus team are currently working with NHS organisations VTE leads to develop an outcome measure for the hospital acquired thrombosis (HAT) rate. This builds on pioneering work undertaken by Betsi Cadwalader University Health Board. By March 2012, six out of eight

organisations had a process in place for achieving this and the other two are working towards this. This is an important step forward in the overall work to tackle VTE as the precise incidence of HAT is difficult to assess reliably from existing data collection/coding systems. Wales may become the first country to achieve a national HAT rate.

Transforming Maternity Care and Preventing VTE

21. 1000 Lives Plus launched its Transforming Maternity Services collaborative in March 2011. This picked up the specific elements for preventing VTE in pregnancy. The overall aim of this programme area is to improve the experience and outcomes for women, babies and their families within Maternity Services. One of the drivers in achieving this aim is to reduce the risk of venous thromboembolism in pregnancy.

22. A universal VTE risk assessment for pregnant women has been agreed. This followed consultation with experts from within Wales and the relevant endorsement committees. Consensus has been reached on agreeing two exemplar DVT Risk Assessment Templates – one relating to the initial 'Booking' visit, which is to be included in the National Hand-Held records and one relating to Antenatal Admission and the puerperium (postnatal period). This has been a significant achievement for the mini-collaborative in a short period of time. This demonstrates the strong clinical leadership and engagement as well as commitment evident in this important area of practice.

23. All maternity units are currently implementing these risk assessments following localisation and agreement within their scrutiny committees. Work is also underway to implement a combined antenatal booking and admission risk assessment within gynaecological wards alongside the general DVT risk assessment.

Health and Social Care Committee

Meeting Venue:	**Committee Room 1 - Senedd**
Meeting date:	**Wednesday, 2 May 2012**
Meeting time:	**09:00 - 12:05**

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

This meeting can be viewed on Senedd TV at:
http://www.senedd.tv/archiveplayer.jsf?v=en_200004_02_05_2012&t=0&l=en

Concise Minutes:

Assembly Members:	**Mark Drakeford (Chair)** **Mick Antoniw** **Rebecca Evans** **Vaughan Gething** **William Graham** **Elin Jones** **Darren Millar** **Lynne Neagle** **Lindsay Whittle** **Kirsty Williams**
Witnesses:	**Val Baker, Parkinson's UK Cymru** **Nick Bennett, Community Housing Cymru** **Richard Davies, Gwalia Housing Group** **Grant Duncan, Welsh Government** **Steve Ford, Parkinson's UK Cymru** **Kevin Hughes, Pennaf Housing Group** **Dr Chris Jones, Welsh Government** **Rachel Lewis, Age Alliance Wales** **Sue Phelpps, Alzheimer's Society** **Chris Quince, Alzheimer's Society** **Angela Roberts, Age Alliance Wales**
Committee Staff:	**Llinos Dafydd (Clerk)** **Meriel Singleton (Clerk)** **Catherine Hunt (Deputy Clerk)** **Stephen Boyce (Researcher)**

1. Introductions, apologies and substitutions

1.1 There were no apologies or substitutions.

2. Inquiry into Residential Care for Older People - Evidence from third sector organisations and providers and on alternative models

Inquiry into Residential Care for Older People - Evidence from Community Housing Cymru

2.1 The witnesses responded to questions from members of the Committee on residential care for older people.

2.2 The witnesses agreed to provide information on the proportion of members of housing group boards that are in residential care.

Inquiry into Residential Care for Older People - Evidence from Age Alliance Wales

2.3 The witnesses responded to questions from members of the Committee on residential care for older people.

Inquiry into Residential Care for Older People - Evidence from the Alzheimer's Society & Parkinson's UK Cymru

2.4 The witnesses responded to questions from members of the Committee on residential care for older people.

3. Organ Donation White Paper - Follow-up briefing from Welsh Government officials

3.1 The officials responded to questions from members of the Committee on the Organ Donation White Paper.

4. Papers to note

Letter from the Auditor General for Wales - Care and Social Services Inspectorate Wales

4.1 The Committee noted the letter from the Auditor General for Wales.

Public health implications of inadequate public toilet facilities - Letter from the Communities, Equalities and Local Government Committee

4.2 The Committee noted the letter from the Chair of the Communities, Equalities and Local Government Committee.

Letter from the Secretary of State for Wales - Convention on the rights of older people

4.3 The Committee noted the letter from the Secretary of State for Wales and agreed to share a copy with the Older People's Commissioner for Wales.

Petition: P-04-359 Problems with the NHS for the Deaf

4.4 The Committee noted the letter from the Petitions Committee.

TRANSCRIPT
View the meeting transcript.