



# **REPORT OF THE INAUGURAL MEETING OF THE GLOBAL VTE PREVENTION FORUM**

***Including agreement of the International VTE Prevention  
Consensus Statement***

**Sunday 24<sup>th</sup> July 2011  
8.30am – 12.30pm**

**Kyoto, Japan**



***Held in the Royal Room of the Grand Prince Hotel, Kyoto, during the XXIII Congress  
of the International Society of Thrombosis and Haemostasis***

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## 1. Foreword

We were delighted to co-chair the inaugural meeting of The Global VTE Prevention Forum on behalf of the Japanese Patient Safety Campaign PARTNERS, and the NHS VTE Prevention programme in England, during the XXIII Congress of the International Society on Thrombosis and Haemostasis (ISTH) in Kyoto, Japan on 24<sup>th</sup> July 2011.

Venous Thromboembolism (VTE) is a significant international patient safety issue. It is a well established fact that VTE is the number one cause of avoidable hospital mortality, with 10% of patients dying in hospital or within three months after admission from VTE acquired during a hospital stay. Effective measures to prevent and treat VTE are proven to exist. Yet astonishingly, research shows that globally, half of all patients at risk of hospital acquired VTE do not receive appropriate prophylaxis.

The Global VTE Prevention Forum (the Forum) has been established to address this significant patient safety challenge. It brings together clinicians and policy makers from across the world who have been leading on the development and implementation of VTE prevention protocols and policy within their home country. The Forum will provide a global platform to share learning and best practice, and to exchange views and information about effective prevention and management of VTE. It will provide leadership at a global level to improve patient care and reduce further avoidable deaths in hospitals through VTE prevention.

We were delighted to welcome VTE prevention leaders from seven countries to the Forum's inaugural meeting: Australia, Canada, England, Germany, Japan, New Zealand, and The United States of America. We were greatly encouraged by the willingness of all those present to share resources and best practice about approaches to implementing VTE prevention.

In a significant show of international leadership, we are delighted to launch the International VTE Prevention Consensus Statement. Agreed by Forum members during the inaugural meeting, this establishes seven system-wide principles for implementation across national health systems to successfully improve VTE prevention – and thus lead to a reduction in the incidence of hospital acquired VTE globally.

All Forum members agreed that, in order to deliver real results, the Forum must remain an active group which provides ongoing international leadership on VTE prevention. We encourage clinical or policy representatives from any country with an established VTE prevention programme, or those with a desire to learn from existing best practice, to join the Global VTE Prevention Forum.

We look forward to working closely together in the future to ensure that VTE prevention becomes a priority for national health systems across the world, as a means of reducing further avoidable death in hospital patients worldwide.



**Andrew Gwynne MP**  
Chair, All-Party Parliamentary Thrombosis Group  
(UK)  
Co-Chair, Global VTE Prevention Forum



**Professor Fumimaro Takaku, M.D., Ph.D.**  
Chairman, The National Patient Safety Campaign  
(Japan)  
Co-Chair, Global VTE Prevention Forum

## 2. Overview of the Inaugural Meeting of The Global VTE Prevention Forum

The Co-Chairs opened the inaugural meeting of the Global VTE Prevention Forum by welcoming all those present and thanking them for their commitment to VTE prevention. Dr James Douketis MD made the case for international leadership on VTE prevention by outlining the global scale of hospital acquired VTE, drawing on the latest evidence about VTE epidemiology. Professor Greg Maynard highlighted evidence-based steps which have been proven in American hospitals to effectively implement VTE prevention protocols across a number of institutions. Tim Brown went on to present a case study on how VTE prevention has been improved nationally across the NHS in England.



Each of the members of the Forum then briefly described the progress they are making towards improving VTE prevention in their home countries, outlining the successes they have achieved to date as well as the ongoing challenges they are facing. This led to an open discussion by all Forum members focussing on the key issues which the Forum must address.

Based on the foregoing discussion, all Forum members agreed to a Global VTE Prevention Consensus Statement. This establishes seven system-wide principles for implementation across national health systems if countries are to successfully improve VTE prevention, and thus lead to a reduction in the incidence of hospital acquired VTE globally.



All members agreed that the Global VTE Prevention Forum must meet annually in order to agree a programme of activities that will result in tangible outcomes. A number of Forum members volunteered to host forthcoming meetings in their home countries.

The closed session was followed by an open session in the afternoon for all delegates attending ISTH. This session included presentations by members of the Global VTE Prevention Forum about steps taken in their country to improve VTE prevention. A panel discussion followed which focussed on how high quality VTE prevention can be delivered through education and clinical support for healthcare professionals, and campaign support for patient support groups. The session also reported back the discussion that took place at the inaugural meeting of the Global VTE Prevention Forum earlier in the day, including the seven principles agreed in the Forum's VTE Consensus Statement.

### **Objectives of the Global VTE Prevention Forum**

- To bring together clinical and policy representatives from across the world leading on VTE prevention to discuss the need for international leadership on the issue.
- To agree a Global VTE Prevention Forum Consensus Statement containing broad principles to effectively deliver VTE prevention in a national health system.
- To agree future meetings of the Forum and the leadership required moving forward.

### **Results of the Inaugural Meeting of the Global VTE Prevention Forum**

- ✓ Seven countries were represented at the Forum by clinicians and policy-makers leading on VTE in their home countries. Countries represented at the Forum included Australia, Canada, England, Germany, Japan, New Zealand, and The United States of America.
- ✓ Committee Members recognised that VTE prevention is a basic tenet of safe patient care, yet it remains inadequately addressed in health systems across the world. It was agreed that a wealth of evidence exists on the efficacy and cost-effectiveness of preventative treatment.
- ✓ Committee Members agreed that there is a definite need for international leadership on VTE prevention through the Global VTE Prevention Forum. To be effective, it was agreed that the Forum should allow members to share their national experiences to enable the effective development and delivery of VTE prevention protocols and policy globally.
- ✓ Committee Members agreed on the need for a Global VTE Prevention Forum Consensus Statement which sets out broad, systems-based principles to deliver VTE prevention. This will ensure national institutions retain the flexibility to implement the principles in a manner which reflects local experience and best practice.
- ✓ The Global VTE Prevention Forum Consensus Statement was agreed by all Committee members. Based on the discussion around challenges faced by members and successful approaches in improving VTE prevention, two amendments were made to the draft Consensus Statement.



- ✓ All Committee Members agreed the Global VTE Prevention Forum should remain an active group which provides ongoing, international leadership on VTE prevention, drawing on international best practice.
- ✓ Committee Members agreed the Forum should meet annually, with the location of the meeting reflecting the location of ISTH every other year. For intermittent years, locations should reflect those countries leading the way in improving VTE prevention nationally and / or those countries needing further support for VTE prevention nationally.

#### **Next Steps for the Global VTE Prevention Forum**

- Circulate the report of the closed session, including speaker slides, to all Committee members.
- Circulate suggested dates and host cities for next (two) meetings to all Committee members.
- Send the press release about the Global VTE Prevention Forum Consensus Statement to media organisations in England and Japan.
- Agree on steps to encourage other country representatives to join the Forum.

### 3. Summary of Discussion during the Inaugural Meeting of The Forum, 24<sup>th</sup> July 2011

#### i. Welcome and opening remarks: Co-Chairs

**Mr Andrew Gwynne MP, Chair, United Kingdom House of Commons All-Party Parliamentary Thrombosis Group**

**Dr. Fumimaro Takaku, Chairman, National Patient Safety Campaign “PARTNERS”; President, The Japanese Association of Medical Sciences; President, Japanese Society for Quality and Safety in Healthcare**



Andrew Gwynne MP opened the inaugural meeting of the Forum by thanking Dr Takaku for inviting him to Co-Chair the meeting, and by welcoming all the experts who had accepted the invitation to join the Forum. He outlined the rationale for the group, emphasising the need to prevent the thousands of avoidable deaths from VTE across the globe and to draw on and share the expertise of those already leading the way in their home nations.

Dr Takaku thanked everyone for accepting the invitation to join the Global VTE Prevention Forum. He emphasised the need to share best practice and learn from others countries' approaches to VTE prevention to allow the Forum to provide effective international leadership on VTE prevention.

#### ii. VTE epidemiology – the case for VTE prevention

**Dr James Douketis MD, Professor of Medicine, McMaster University & Director of Vascular Medicine, St. Joseph’s Healthcare, Hamilton, Canada**

Dr Douketis outlined research suggesting that 543,454 deaths occur due to VTE in Europe each year; twice the combined deaths due to AIDS, breast cancer, prostate cancer and transport accidents. He drew on American statistics demonstrating the prevalence of VTE across different patient groups, and stated that this variation increases scepticism about VTE incidence while also giving no group of health professionals immediate responsibility for the issue.



Dr Douketis described current international practice on VTE prevention by drawing on the ENDORSE study of VTE incidence and prophylaxis across 32 countries and 68,138 patients. The study found that 52% of all patients included in the study, when risk assessed for VTE, were identified as being at risk of VTE. In addition, 51% of all patients included in the study received appropriate thromboprophylaxis according to American College of Chest Physicians (ACCP) VTE prevention guidelines. However, the research identified that thromboprophylaxis rates varied widely from country to country: some countries provided preventative treatment to less than 10% of their patients (such as Bangladesh and Thailand), while other countries provided appropriate thromboprophylaxis to almost 90% of their patients (notably, Germany). ENDORSE also suggests that medical patients are less likely to receive appropriate thromboprophylaxis: only 59% of the surgical patients at risk of VTE received appropriate thromboprophylaxis, while only 40% of the medical patients at risk of VTE received preventative treatment.

Dr Douketis drew on results from a Canadian anticoagulation study to suggest explanations for the gap in patients receiving appropriate thromboprophylaxis when at risk of VTE. Only 0.5% of those questioned stated that they did not consider prophylaxis to be important, and only 12% cited cost concerns. The biggest barrier to consistent implementation, cited by 75% of respondents, was that physicians can prescribe on an individual basis rather than according to an agreed, institution-wide protocol.

Dr Douketis closed by comparing VTE to more high profile public health initiatives such as C Difficile and diarrhoea, noting that VTE incidence is higher than both these conditions. He stated that a systems-wide approach which views VTE prevention as a public health initiative is necessary if we are to deliver reductions in VTE incidence globally.

### **iii. Features of a successful VTE prevention protocol**

**Professor Greg Maynard MD, MSc, SFHM, Clinical Professor of Medicine; Director, Center for Innovation and Improvement Science, University of California, San Diego**



Professor Greg Maynard stated that an institution-wide approach to VTE prevention is required to deliver improved outcomes. He set out key steps based on lessons learned from implementing a VTE protocol across 250 hospitals in America, which have driven appropriate thromboprophylaxis rates up from 50% of patients to consistently over 95% of patients.

Firstly, evidence must be distilled into a protocol which includes a standardised risk assessment, appropriate thromboprophylaxis options, and a list of contraindications to pharmacological VTE prophylaxis. He suggested that the best risk assessment models are simple and text-based, with only 2 or 3 layers of VTE risk which avoid over-complication. He also suggested risk assessments must be physician-led, but require team support with nurses and pharmacists providing a safety net. Having a written protocol in place can drive prophylaxis rates from 40% to 50% of patients.

The second step to success is to ensure these protocols are well embedded in admission procedures, as opposed to stand-alone exercises. Professor Maynard suggested this step can improve prophylaxis rates from 50% to between 65% and 85% of patients.

To drive prophylaxis rates to around 90% of patients, Professor Maynard stated that protocols must be enhanced through continued refinement and revisions. This should include education of staff members and ongoing monitoring of the impact of risk assessments to tweak the protocol.

Finally, Professor Maynard outlined a 'measure-venture' approach: 'daily measurement drives concurrent intervention'. This system identifies whether patients are receiving prophylaxis and places them on an electronic system into one of three zones: red (no anticoagulation), amber (mechanical prophylaxis only), and green (appropriate pharmacological prophylaxis). The aim is to move patients out of the red zone by empowering nurses to administer mechanical prophylaxis and contact a physician if no anticoagulant is in place and there are no obvious contraindications. This approach can drive appropriate thromboprophylaxis rates to 95%.

#### iv. Case Study – the NHS in England: a national approach to VTE prevention

##### Tim Brown, Advisor to the NHS National Clinical Director for VTE (England)

Tim Brown outlined how a campaign begun in 2005 by health professionals, parliamentarians and patient groups has successfully used effective messaging about the clinical and financial burden of hospital acquired VTE to persuade England's Department of Health to develop a national approach to VTE prevention. Led by the Chief Medical Officer, Sir Liam Donaldson and subsequently the NHS Medical Director, Sir Bruce Keogh, The National VTE Prevention Programme was launched in 2009 and aims to reduce avoidable death and long term disability from VTE acquired as a result of an inpatient stay.



The National VTE Prevention Programme approaches VTE as a public health / patient safety issue. It utilises a number of national system levers to improve performance across English hospitals, including both financial incentives and contractual obligations. At its core is a national VTE risk assessment policy for all adult patients on admission underpinned by robust data collection, appropriate prophylaxis based on national clinical guidelines, and meaningful patient outcomes indicators. Since June 2010, every hospital in England has been required to provide monthly census data on the percentage of patients receiving a VTE risk assessment on admission using national clinical criteria. This data is published by the Department of Health quarterly. If a hospital risk assesses 90% or more of patients for VTE, they can access a financial reward. Hospitals are also required to report locally on the percentage of patients who receive appropriate thromboprophylaxis, and on the results of root cause analysis of every hospital acquired VTE. These and other levers have proved effective in improving performance, with national VTE risk assessment rates increasing from 45% to over 80% in less than a year.

Challenges for the sustainability of VTE prevention across the NHS in England include improving professional and public awareness of the risk of hospital acquired VTE, improving systems for data collection and audit, and measuring outcomes. Success will require medical professionals to share best practice and resources, and parliamentarians and patient groups to hold the NHS to account.

#### v. Open discussion including country contributions from Forum members

##### Australia

- o Luke Slawomirski, Australian Commission on Safety & Quality in Healthcare

Mr Slawomirski explained that the National Health and Medical Research Council in Australia began its VTE programme in 2006. This has involved the introduction of pilot schemes where VTE risk-assessment is included on patient charts. Local data has proved very useful in engaging sceptics critical of VTE incidence figures and who fear losing professional autonomy in VTE prevention; the programme is therefore examining case notes over three years to collect evidence on state-wide mortality and morbidity from VTE. They are also examining how a Quality Incentive Programme (QuIP) can use remuneration to reduce unnecessary hospital readmissions from VTE.



Mr Slawomirski set out four messages for success. Firstly, the focus must be on winning hearts and minds of both clinicians and the public. Secondly, performance must be measured to benchmark and gauge success. Thirdly, VTE prevention processes must be streamlined before the focus turns to outcomes. Finally, there must be a solid communications strategy to engage stakeholders, such as clinicians and patients, across a range of media.

### Canada

- **Dr James Douketis MD, Professor of Medicine, McMaster University & Director of Vascular Medicine, St. Joseph's Healthcare, Hamilton**



Dr Douketis explained that VTE prevention is a priority for Accreditation Canada, an organisation that audits hospitals against agreed benchmarks. It measures hospitals' performance on VTE prevention for five standards across the patient pathway: the existence of a written VTE prevention policy, the provision of evidence based thromboprophylaxis, the use of local audits for quality improvement on prophylaxis, post-discharge thromboprophylaxis for major orthopaedic surgery patients, and education for healthcare professionals and patients about the risk of VTE. Weak performers identified by Accreditation Canada are required to report within six months on the steps they have taken to improve their policies. The results of the audits demonstrate a disconnect between the evidence behind the need for improved VTE prevention in Canada, and the implementation of best practice. Dr Douketis noted that much remains to be done to improve the gap in performance across Canada.

### Germany

- **Professor Sebastian Schellong, Professor of Angiology, Director of the Centre of Vascular Diseases, University of Dresden**



Professor Schellong emphasised that Germany's situation on VTE prevention is fairly unique, since as a federal government, there is no overall control over the health system. Health services are distributed via insurance companies, leaving no single organisation responsible for overseeing quality control. As such, leadership on VTE prevention is left to medical societies who are responsible for raising professional and public awareness about VTE; there are no federal or public campaigns on the issue. Despite this, Germany continues to deliver high prophylaxis rates. The ENDORSE study demonstrated that 90% of German patients received ACCP recommended thromboprophylaxis. Professor Schellong noted therefore that professional awareness regarding VTE is high. The focus for Germany on VTE prevention is therefore of a clinical nature rather than a quality and leadership issue, regarding the overtreatment of VTE and the need to adjust VTE treatment regimes locally.

### New Zealand

- **Dr Vinod Singh, Honorary Clinical Senior Lecturer in Medicine & Consultant Physician in acute stroke and acute internal medicine, North Shore Hospital, Auckland**
- **Anne Blumgart, Secretary New Zealand VTE Prevention Steering Group**



The focus in New Zealand remains the need for practical support and education to effectively deliver VTE prevention. Activity is being led by the New Zealand National VTE Steering Group, which has 14 members and meets quarterly. Clinical support began with a workshop in 2007. This was followed in 2010 with a 3 day workshop in conjunction with England's National VTE Prevention Programme. Another such workshop is being planned for 2011. Local evidence suggests that improvements are being made in VTE prevention for surgical patients, though this is not the case for medical patients. The New Zealand VTE Steering Group has recently started lobbying the Quality Improvement Committee at the Ministry of Health as well as the Health Quality and Safety Commission, to take on national responsibility for improving and standardising VTE prevention across the country.

## Japan

- **Dr Norimasa Seo, Director, Museum Avenue North Medical Center, Takamatsu City; Clinical Professor, Faculty of Medicine, Kagawa University; Visiting Professor at the School of Medicine of Showa University, Japan**
- **Dr Masatoshi Watanabe, Team Leader, Patient Safety Promoting Unit, Health Policy Bureau, Ministry of Health, Labour and Welfare**

Dr Seo explained that statistics traditionally suggest that the incidence of VTE is much lower in Japan than the West: there are currently ten times the number of clinical diagnoses of VTE, and three times the number of autopsy diagnoses, in Europe than there are in Japan. However, Dr Seo stated that evidence now suggests the incidence and frequency of VTE in Japan is approaching levels similar to the West. He noted that the same anticoagulants are now available for use in Japan as in Europe and the USA, and that the latest Japanese clinical guidelines from 2004 are in the process of being updated and will be due out later this year, drawing on England's NICE Guidelines and America's ACCP guidelines. Japan's National Patient Safety Campaign from May 2008 to May 2010 included a focus on preventing perioperative VTE and statistics have demonstrated a reduction in the mortality rate from VTE as a result. However, Dr Seo argued that since VTE occurs in all diagnosis and treatment departments, it needs to be tackled in a uniform manner throughout all Japanese hospitals as a measure for safer medical treatment. He stated that patients and medical professionals need to work together to deliver this and that an internationally agreed set of principles to deliver improved outcomes will be key to providing this leadership.



Dr Watanabe attended on behalf of Dr Mitsunori Okamoto, Japan's Parliamentary Secretary for Health, Labour and Welfare. He paid tribute to the work being led by Dr Uehara and Dr Takaku through the National Patient Safety Campaign on preventing perioperative VTE, as the second of eight behavioural targets in the Campaign. He noted that Dr Seo is leading the clinical aspect of VTE prevention, including contributing to the updated Japanese VTE prevention guidelines due for publication later in the year. Dr Watanabe stated that it is crucial for clinicians and patients to cooperate and coordinate to deliver the results of the National Patient Safety Campaign and to improve VTE prevention across Japan.



## USA

- **Professor Greg Maynard MD, MSc, SFHM, Clinical Professor of Medicine; Director, Center for Innovation and Improvement Science, University of California, San Diego**

Professor Maynard stated that VTE prevention in the USA is being led by pockets of independent clinicians. The introduction of VTE as a 'never event' has been successful in raising awareness amongst health professionals given the financial penalty when VTE occurs. Professor Maynard noted that in the absence of a national programme on VTE prevention, it is left to third sector organisations such as the National Blood Clot Alliance and the North American Thrombosis Forum to raise patient awareness about hospital acquired VTE. President Obama has recently invested \$500,000,000 in health to prevent complications and readmissions in the long-term – this could naturally be put towards VTE prevention. In addition, specific funds have been provided to regional hospital associations for the improvement of VTE prevention. Professor Maynard concluded by noting that while current performance remains varied, he is optimistic for a reduction in hospital acquired VTE in America given the improving professional awareness about VTE, and the Obama administration's investment in VTE prevention.



### Patient Awareness & Compliance

- Professor Beverley Hunt, Medical Director of Lifeblood: The Thrombosis Charity (UK)
- Professor Samuel Z. Goldhaber, MD, Chair, North American Thrombosis Forum (USA)

Professor Beverley Hunt described the role that Lifeblood plays as the only charity campaigning for mandatory VTE risk assessment and thromboprophylaxis in the UK. She stated that, in considering how to raise patient awareness about VTE, the starting point must be to ascertain what the public currently knows about the issue. Research by Lifeblood found that the public is generally aware of DVT in relation to 'economy class syndrome'. To address this gap in knowledge around hospital acquired VTE, the charity considered how to effectively deliver the message about the risks of hospital acquired VTE. Through focus groups, Lifeblood found that the public understands and retains the term 'hospital acquired clots' far more than 'VTE'. As such, Lifeblood engages with the media about hospital acquired clots and runs annual campaigns with various hooks to engage the public. Previous campaigns have been run on the prevalence of VTE in the young, the cost to the health service of litigation about hospital acquired VTE, and the millions of patients at risk of VTE when they fail to be risk assessed on admission. The charity aims to use innovative methods to engage with patients, including social media. Government plays an additional role in raising patient awareness through NHS websites and patient information leaflets.



Professor Sam Goldhaber outlined that the North American Thrombosis Forum is a not-for-profit organisation which has in the past worked with America's Surgeon General, including when he issued a report in 2008 stating that preventing VTE in hospital is the number one way to reduce in-hospital deaths. Professor Goldhaber emphasised that American healthcare begins at the local level, leaving some states to lead the way in raising VTE public awareness, while others are lagging behind. Professor Goldhaber suggested that any opportunities to raise awareness through the use of celebrities, and parliamentarians where possible, is crucial to driving engagement with the public. He finished by stating that progress will be made through partnerships between non-profits, public bodies, the clinical community and industry, reflecting the successful approach which has been taken in England.



### Discussion between Forum Members

#### Engaging Patients

Luke Slawomirski noted that patients are an untapped resource, particularly in healthcare systems such as Germany and America where patients are consumers in health insurance policies. Professor Greg Maynard agreed, noting that patients are a key group to engage as America attempts to reduce the variation that exists across the country in VTE prevention. This certainly forms part of the work he is leading across 250 hospitals. Professor Samuel Goldhaber drew on a local study examining why patients were not given prophylaxis where appropriate. The study found that, in nearly half of all cases in which the anticoagulant was not administered as required, the reason given was that the patient did not want an injection. Professor Goldhaber emphasised that this highlighted the need to educate patients and their families on the risk of hospital acquired VTE on admission. Dr Seo discussed the approach being taken in Japan to improve patient awareness, particularly noting the need to use mass media.



### Engaging Politicians

Professor Goldhaber highlighted the impact that a vocal group of parliamentarians has had in England to prioritise VTE prevention nationally. Andrew Gwynne MP agreed, stating that upon being approached by Lifeblood and being briefed on the prevalence of VTE and the ease with which it can be prevented, he felt compelled to raise the issue with colleague Members of Parliament in the House of Commons.



### Engaging and Educating Clinicians

Anne Blumgart commented on the need to use innovative ways to engage with clinicians who remain sceptical about VTE incidence. She suggested that sharing patient experiences with clinicians might help achieve this. Professor Beverley Hunt described the work Lifeblood is leading in England to lobby for improved undergraduate medical education on VTE prevention. Professor Schellong explained that medical awareness about VTE prevention is high in Germany, perhaps due to the high levels of ultrasounds and tests for cause of death where patients die in the community and a PE is suspected. Professor Samuel Goldhaber stated that the Global VTE Prevention Forum would be a key tool to driving clinician engagement. He urged the Forum to produce enduring materials so that it delivers global improvements in VTE prevention.



## vi. Agreement of VTE Prevention Consensus Statement and next steps

The following two amendments were suggested to the draft Global VTE Prevention Forum Consensus Statement:

- Luke Slawomirski suggested the draft principle ‘make VTE prevention a priority for health commissioners’ be amended to ‘make VTE prevention a priority for health policy makers’.
- Professor Greg Maynard suggested the Consensus Statement needs to include an additional bullet point which requires every hospital to develop a formal, written institution-wide VTE prevention policy.

Both these amendments were accepted by the Forum and incorporated in to the final Consensus Statement, establishing a set of seven principles for a system-wide approach to prevent VTE globally.

All Committee Members agreed the Global VTE Prevention Forum should remain an active group which provides ongoing, international leadership on VTE prevention, which draws on best practice as it develops. To achieve this, Committee Members agreed the Forum should meet annually in order to develop and deliver a programme of activities which delivers tangible results. It was agreed that, in order to maximise attendance, the location of the meeting should reflect the location of ISTH every other year. For intermittent years, locations should reflect those countries leading the way in improving VTE prevention nationally and / or those countries needing further support for VTE prevention nationally. Offers to host forthcoming meetings were received from USA, New Zealand, Australia and England.



#### **vii. Closing remarks; date and venue of next Forum meeting**

Andrew Gwynne MP and Dr Fumimaro Takaku thanked everyone for attending the inaugural meeting of the Global VTE Prevention Forum and for the leadership they had demonstrated in agreeing the Global VTE Prevention Forum Consensus Statement.

Now that the groundwork has been laid for the Forum and a set of principles established, next steps can be explored to share best practice and learning in order to implement these principles. Suggested locations and dates for the next meeting will be circulated by the Forum Secretariat in due course.

## Appendix 1: The Global VTE Prevention Forum Consensus Statement

**Venous Thromboembolism (VTE) is a significant international patient safety issue as the number one cause of preventable hospital mortality. VTE is the immediate cause of death in 10% of all patients who either die in hospital or within three months after admission. Proven, effective measures are available to prevent and treat DVT and PE in high-risk individuals. Yet today the majority of individuals who could benefit from such proven services do not receive them. To reduce harm associated with VTE we endorse the application of a system-wide approach to VTE prevention on a global scale, that seeks to:**

- **Raise levels of public awareness and information around the risks of VTE;**
- **Improve professional education about VTE prevention;**
- **Develop a systematic approach to VTE prevention for hospitalised patients;**
- **Ensure that every hospital develop a formal strategy, in the form of a written institution-wide VTE prevention policy**
- **Develop a system for monitoring compliance with VTE best practice;**
- **Improve VTE metrics in national and international data collections; and**
- **Make VTE prevention a priority for health policy makers.**

VTE not only kills, but can also have devastating co-morbidities which significantly impact on the quality of life for those patients who survive a blood clot. Safe and effective methods of VTE prevention have been known for many years, but despite this, implementation of VTE prevention best practice still remains largely unaddressed in many hospitals worldwide.

The only way to truly address this public health challenge is for national health systems to prioritise the development of systematic and integrated approaches to VTE prevention that can be implemented in primary, secondary and tertiary settings.

In recent years, it has become apparent in some countries that reducing avoidable death and chronic ill health from hospital acquired VTE is both achievable and desirable in addressing the human and financial costs of VTE. Estimates of the overall annual costs of VTE and its complications, namely chronic venous insufficiency, vary from US\$720 million-1 billion in Western European countries<sup>i</sup>, to US\$3 billion in the USA<sup>ii</sup>.

**With VTE now becoming a priority patient safety issue for a number of healthcare systems around the world, clinicians from across the world have demonstrated their support for the development of a global initiative to share VTE prevention best practice, modelled on the tried and tested approaches taken by international VTE exemplars.**

The Global VTE Prevention Forum (the Forum) has been established as a unique platform for policy decision makers, clinicians and multidisciplinary teams to share learning, best practice and exchange views and information. Its main aim is to improve patient care through more effective treatment and prevention of VTE. The Forum agrees that VTE should now be seen as a priority for national health systems as a means of reducing further avoidable death in hospital patients around the world.

Clinical or policy representatives from any country with an established VTE prevention programme, or those with a desire to learn from existing best practice, are encouraged to join the Global VTE Prevention Forum, which held its inaugural meeting during the XXIII Congress of the International Society on Thrombosis and Haemostasis in Kyoto, Japan on 24 July 2011.

## Appendix 2: Global VTE Prevention Forum Terms of Reference

### Purpose

1. The **Global VTE Prevention Forum** was officially formed following the inaugural meeting of the International VTE Prevention Policy Forum in Kyoto, Japan on 24th July 2011, which took place during the XXIII Congress of the International Society on Thrombosis and Haemostasis (ISTH).
2. The **Global VTE Prevention Forum** was established as a platform for decision makers and clinicians, as well as those responsible for VTE policy development and implementation at a national level, to share learning and best practice and exchange views and information aimed at improving patient care through more effective treatment and prevention of VTE at a global level.

### Scope and Functions

3. The **Global VTE Prevention Forum** will meet on a regular basis as necessary to develop and showcase education and clinical support for healthcare professionals and patient support groups involved in thrombosis prevention and management.
4. Within this scope, the **Global VTE Prevention Forum** shall:
  - a) identify and address fundamental patient safety issues as well as current and emerging matters of clinical importance relevant to the prevention and management of venous thromboembolism;
  - b) aim to draw conclusions and make summary best practice recommendations on the basis of results of exemplary VTE prevention initiatives and activities worldwide, and other information such as research and clinical trial results;
  - c) provide a forum for the exchange of views and information on thromboprophylaxis;
  - d) facilitate best practice by identifying solutions to problems with implementation of best practice globally within member state health systems;
  - e) recommend the underlying principles upon which appropriate best practice VTE prevention and management standards and measures should be based;
  - f) promote member state national audit of thromboprophylaxis;
  - g) raise patient and public awareness of the importance of thromboprophylaxis;
  - h) identify issues on which an exchange of information and/or additional international efforts would be required.

### Membership

5. The **Global VTE Prevention Forum** is established with clinical and national policy representation from (England; Japan; New Zealand; Australia; Germany; USA; Canada), including a chairperson and two vice-chairpersons. Other countries are encouraged to join this forum.
6. Membership of the **Global VTE Prevention Forum** shall be open to those clinicians, patient group organisations or national governmental organisations and institutions who demonstrate commitment, leadership and innovation in increasing concordance with VTE risk assessment in their clinical or legal jurisdictions.



7. Members shall participate in the **Global VTE Prevention Forum** in their personal capacity and shall only represent their national Governments unless specified at the time of joining.
8. Their participation shall not be delegated without prior agreement.
9. Membership shall be for a period of four years.

### **Working Methods**

10. The **Global VTE Prevention Forum** shall determine its own working procedures.
11. The **Global VTE Prevention Forum** may establish task groups composed of the **Global VTE Prevention Forum** members and/or other recognised experts to study specific problems as necessary. The terms of reference and membership of such groups shall be determined by the **Global VTE Prevention Forum**.
12. The chairperson/persons of the **Global VTE Prevention Forum** shall act as the spokesperson of the **Global VTE Prevention Forum** in communicating its views to the international VTE prevention community, the media and the public. The recommendations and opinions of the **Global VTE Prevention Forum** shall, at the request of the **Global VTE Prevention Forum**, be published through the **Global VTE Prevention Forum** secretariat.
13. Meetings of the **Global VTE Prevention Forum** shall be convened by its chairperson / persons through notifications to be issued by the Secretariat. The **Global VTE Prevention Forum** will aim to meet once annually and there shall normally be no more than two meetings of the **Global VTE Prevention Forum** per year, with every effort made to coincide the dates and venue of these meetings with appropriate VTE scientific and clinical conventions to ensure maximum attendance by members in geographically diverse venues.
14. Task groups shall meet as necessary to accomplish their designated task(s).
15. Meetings of the **Global VTE Prevention Forum** and task groups shall be conducted in English.

### **Secretariat, Administrative Support and Costs**

16. The secretariat and administrative services for the **Global VTE Prevention Forum** and its task groups shall be provided by the UK Secretariat of the inaugural meeting of the International VTE Prevention Policy Forum in Kyoto, which was provided by King's College London Thrombosis Centre and Insight PA Ltd. Funding for the support and costs will be sought by the secretariat from Pharmaceutical Consortia.

## Appendix 3: The Global VTE Prevention Forum

### Co-Chairmen

- Mr Andrew Gwynne MP, Chair, United Kingdom House of Commons All-Party Parliamentary Thrombosis Group (England)
- Dr. Fumimaro Takaku, Chairman, National Patient Safety Campaign “PARTNERS”; President, The Japanese Association of Medical Sciences and President, Japanese Society for Quality and Safety in Health Care (Japan)

### Vice Chairmen

- Dr Roopen Arya, Chair, National Health Service VTE Exemplar Network, (England)
- Dr James Douketis MD, Professor of Medicine, McMaster University & Director of Vascular Medicine, St. Joseph’s Healthcare, Hamilton, (Canada)
- Professor Greg Maynard MD, MSc, SFHM, Clinical Professor of Medicine; Director, Center for Innovation and Improvement Science, University of California, San Diego (USA)

### Forum Attendees

- Anne Blumgart, Secretary, New Zealand VTE Prevention Steering Group; Honorary Clinical Lecturer, The School of Pharmacy, The University of Auckland (New Zealand)
- Dr Takeshi Fuji, Vice President, Osaka Koseinenkin Hospital, OSAKA; Spine surgeon, Orthopaedic surgeon (Japan)
- Samuel Z. Goldhaber, MD, North American Thrombosis Forum (USA)
- Dr Kazuhiko Hanzawa, Thoracic and Cardiovascular Surgery, Niigata University Graduate School of Medicine and Dental Science, Niigata University, Research Institute for Natural Hazards and Disaster Recovery (Japan)
- Professor Beverley Hunt, Medical Director, Lifeblood; the Thrombosis Charity (England)
- Ms Yoshiko Kinoshita, RN, PhD, Institution of Nursing care, NTT Medical Centre Tokyo (Japan)
- Dr Takao Kobayashi, Director, Hamamatsu Medical Centre (Japan)
- Dr Shunzo Koizumi, Professor Emeritus Saga University and Director, Shichijo Clinic (Japan)
- Dr Masayuki Kuroiwa, Instructor, Department of Anaesthesiology, Faculty of Medicine, Kitazato University (Japan)
- Dr Mashio Nakamura, Associate Professor, Department of Cardiology and Nephrology, Mie University Graduate School of Medicine (Japan)
- Dr Takeshi Nakano, Chairman of Japanese Society of Pulmonary Embolism Research; Professor Emeritus at Mie University (Japan)
- Dr Simon Noble, Lifeblood; the Thrombosis Charity (England)
- Dr Masato Sakon, Director, Nishinomiya Municipal Central Hospital (Japan)
- Professor Sebastian Schellong, Professor of Angiology, Director of the Centre of Vascular Diseases, University of Dresden, (Germany)
- Dr Norimasa Seo, Chief, VTE Prevention Team, National Patient Safety Campaign; and Clinical Professor, Faculty of Medicine, Kagawa University (Japan)

- Dr Vinod Singh, Honorary Clinical Senior Lecturer in Medicine & Consultant physician in acute stroke and acute internal medicine, North Shore Hospital, Auckland (New Zealand)
- Luke Slawomirski, Australian Commission on Safety & Quality in Healthcare (Australia)
- Dr Naruo Uehara, Director, National Patient Safety Campaign & Professor, Quality and Health Systems, Tohoku University School of Medicine (Japan)
- Dr Masatoshi Watanabe, Team Leader, Patient Safety Promoting Unit, Health Policy Bureau, Ministry of Health, Labour and Welfare (Japan)
- Dr Norikazu Yamada, Associate Professor, Department of Cardiology and Nephrology, Mie University Graduate School of Medicine (Japan)
- Dr Chikao Yasuda, Assistant Professor, Department of Surgery, Kinki University School of Medicine & Division of Patient Safety, Kinki University Hospital (Japan)

#### **Forum Secretariat**

- James Tyrrell (UK)
- Poonam Arora (UK)
- Tim Brown (UK)

#### **Support**

The Global VTE Prevention Forum is a result of a joint patient safety initiative between the National VTE Prevention Programme in England and the National Patient Safety Campaign in Japan, which together form the joint secretariat of the Global VTE Prevention Forum. We are grateful to Boehringer Ingelheim Ltd and Bayer Plc for their educational grants which helped facilitate the first meeting of the Global VTE Prevention Forum.

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#### **References**

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<sup>ii</sup> McGuckin M, Waterman R, Brooks J, Cherry G, Porten L, Hurley S, et al. Validation of venous leg ulcer guidelines in the United States and United Kingdom. *Am J Surg*. 2002;183:132-7.