The All-Party Parliamentary Thrombosis Group

"Thrombosis: Awareness, Assessment, Management and Prevention"

SECOND ANNUAL AUDIT OF ACUTE NHS HOSPITAL TRUSTS

November 2008

Executive Summary

- **84%** of Acute NHS Trusts responded (138 of 165 Trusts)
- **99%** of Acute NHS Trusts said that they were aware of the Chief Medical Officer's (CMO) recommendations on the prevention of venous thromboembolism (VTE) and NICE Clinical Guideline on the prevention of VTE in patients undergoing surgery
- **70%** of Acute NHS Trusts are undertaking a documented mandatory risk assessment for all hospital inpatients in line with the CMO's recommendations
- **86%** of Acute NHS Hospital Trusts have in place a multi-disciplinary thrombosis committee / team responsible for the management of patients with hospital-acquired DVT in line with the CMO, NICE and the Health Select Committee's recommendations
- **87%** of Acute NHS Hospital Trusts offer staff some form of education regarding hospital-acquired DVT risk assessment
- Only **24%** offer all patients information on the risks of thrombosis when they enter hospital

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ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP

November 2008

Dear Colleague,

Welcome to the second annual report of the All-Party Parliamentary Thrombosis Group (APPTG) which outlines the findings of the 2008 survey into the uptake of best practice recommendations on the prevention of hospital-acquired DVT in hospitalised patients.

It is in the interests of patients and the NHS that these best practice recommendations are fully implemented and adhered to, given that hospital-acquired DVT – blood clots – kills an estimated 25,000 patients in England and Wales each year[1]. This is more than the combined total deaths from breast cancer, AIDS and traffic accidents, and more than five times the number who die from hospital acquired infections[2]. Yet whilst DVT is the immediate cause of death in 10% of all patients who die in hospital[3], the majority of these deaths could be prevented with effective low cost interventions.

Last year, the APPTG undertook its first survey to assess the uptake of best practice recommendations made by the Chief Medical Officer's Expert Working Group on the prevention of VTE in hospitalised patients (April 2007), NICE Clinical Guideline 46 into preventing VTE in high risk surgical patients (April 2007) and the recommendations of the House of Commons Health Select Committee inquiry into preventing VTE in hospitalised patients (February 2005).

Our 2007 report found that despite 99% of Trusts being aware of the guidelines, only one-third (32%) of Trusts surveyed were undertaking a risk assessment for all hospital in-patients. This demonstrated that the prevention of DVT did not appear to be a priority for some hospitals, despite the rationale for doing so having been reiterated by the Chief Medical Officer.

[1] The Prevention of VenousThromboembolism in Hospitalised Patients, Second Report of Session 2004–05, February 2005 , p.7. Available at: http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf
[2] Ibid
[3] Ibid

ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP

Many healthcare professionals told us that one of the barriers to risk assessing patients for DVT was the lack of a centralised risk assessment tool, with hospitals being left to create their own protocols to prevent and manage this 'silent killer'. Also, a number of healthcare professionals told us that many who had developed protocols and set up thrombosis committees had been forced to do so with little support and resource from Trust management and where there was a lack of a DVT champion in a Trust, patients were unlikely to receive an assessment of their DVT risk on admission as a result.

Where DVT champions did exist, many found it difficult to track cases of hospital acquired DVT due to the absence of a specific admission code for the condition, making it hard to outline a robust business case to apply for resources to develop a DVT prevention protocol in their Trust.

In September 2008, the APPTG welcomed the publication of the Department of Health DVT Risk Assessment Tool. Despite the significant time taken for this tool to be published, we welcomed this significant development as Trusts now have a base with which to build a risk assessment for all patients being admitted.

We are confident that the impressive response rate of our survey paints an accurate picture of what is being done at the Trust level to reduce the risk of DVT in hospital patients and validates our recommendations on how Government can help Trusts ensure a universal DVT risk assessment becomes a reality.

We thank all of the Acute NHS Hospital Trusts that have responded to our second annual survey and we were further encouraged by many positive letters expressing how the survey had highlighted the issue of the importance of risk assessment once again, providing added incentives to speed up the development of Trust protocols locally.

We hope that once and for all the issue of hospital-acquired DVT will be given the political and public prioritisation it deserves considering the many thousands of people affected and killed by the condition each year.

Yours sincerely,

John Smith MP
Chairman, All-Party Parliamentary Thrombosis Group

Results

Following the success of last year's survey, the All-Party Parliamentary Thrombosis Group (APPTG) decided to repeat their audit to gauge the progress of Acute NHS Hospital Trusts in implementing the Chief Medical Officer's (CMO) recommendations on the prevention of DVT – blood clots - in hospitalised patients and the NICE clinical guideline 46: Venous thromboembolism: reducing the risk of venous thromboembolism in inpatients undergoing surgery.

John Smith MP, Chair of the APPTG, wrote to 165 Acute NHS Hospital Trusts in England in August 2008 asking them to complete the survey. In total, 138 Acute NHS Trusts replied which equates to 84% of Trusts approached. The quality of responses was on the whole very good although some Trusts did leave questions blank or ticked more boxes than it was required to. We believe that with an 84% response rate our results depict an accurate picture of the degree to which Acute NHS Trusts in England have implemented the CMO and NICE's recommendations.

Awareness

1. **Is your NHS Trust aware of the Chief Medical Officer's (CMO) recommendations on the prevention of venous thromboembolism (VTE) and NICE clinical guideline 46?**

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	136	99
NO	0	0
DNR	2	1

As we would expect, eighteen months on, almost all Trusts are now aware of the Chief Medical Officer's recommendations on the prevention of DVT in hospitalised patients and the NICE guideline on preventing DVT in surgical patients, both published in April 2007.

In addition, Acute NHS Hospital Trusts recently received a 'Dear Colleague' letter from the CMO urging hospitals to use the risk assessment tool published by the Department of Health in September 2008.

2. **Who in your NHS Trust is responsible for ensuring your clinical staff are made aware of these recommendations and guidelines?**

For this question Trusts were asked to state who is responsible for ensuring clinical staff were aware of the CMO and NICE recommendations. On the whole, this position was occupied by either the medical director, the head of governance, a consultant haematologist or the chair of the thrombosis committee.

3. Has your NHS Trust signed up to the National Patient Safety Campaign launched on 19 June 2008?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	100	72
NO	21	15
UNKNOWN	6	4
DNR	11	8

The Patient Safety First Campaign (formerly known as the National Patient Safety Campaign) was launched in June 2008 to change the culture within the NHS to one in which patient safety is the highest priority for Trusts with the slogan *'No avoidable death and no avoidable harm*[4]*.'* The campaign initially launched with five clinical interventions which Trusts could voluntarily sign up to: leadership for patient safety; reducing harm from deterioration; reducing harm in critical care; reducing harm in perioperative care; and reducing harm from high risk medicines.

This question was used to gauge the effectiveness of the campaign to date as the APPTG understand that they will be adopting a clinical intervention for the prevention of hospital-acquired DVT in the second wave of their campaign.

72% of Trusts who responded said that they had signed up to the Patient Safety First Campaign which gives a clear indication that the campaign could act as an important vehicle for promoting the importance of DVT risk assessment of patients in Trusts.

> " We believe the trust has made significant progress over the last 18 months. We have now built venous thromboembolism into our top patient improvement programme safety targets. "
>
> Acute NHS Trust, South Central SHA

[4] Patient Safety First Campaign available at: http://www.patientsafetyfirst.nhs.uk/Content.aspx?path=/

4. Does your NHS Trust have a written thromboprophylaxis policy(s) or protocol?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	128	93
NO	9	7
DNR	1	>1

93% of Trusts indicated that they have a written thromboprophyalxis policy(s) or protocol although, as later results indicate, the quality of these policies or protocols and the degree to which they incorporate the CMO and NICE recommendations on preventing hospital-acquired DVT are variable.

Risk Assessment for thrombo-prophylaxis

5a. Does your Trust undertake a documented mandatory risk assessment in line with the CMO and NICE's recommendations for all hospitalised patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES USING AN INDIVIDUALISED OPT IN APPROACH	69	50
YES USING A GROUP SPECIFIC OPT OUT APPROACH	26	19
BOTH	1	>1
NO	42	30
DNR	1	>1

5b. Does your Trust undertake a documented mandatory risk assessment in line with the CMO and NICE's recommendations of high risk surgical patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES USING AN INDIVIDUALISED OPT IN APPROACH	19	46
YES USING A GROUP SPECIFIC OPT OUT APPROACH	9	21
NO	14	33

5c. Does your Trust undertake a documented mandatory risk assessment in line with the CMO and NICE's recommendations of high risk medical patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES USING AN INDIVIDUALISED OPT IN APPROACH	12	29
YES USING A GROUP SPECIFIC OPT OUT APPROACH	8	19
NO	22	52

5d. Does your Trust undertake a documented mandatory risk assessment in line with the CMO and NICE's recommendations of out-patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES USING AN INDIVIDUALISED OPT IN APPROACH	39	28
YES USING A GROUP SPECIFIC OPT OUT APPROACH	10	7
NO	88	64
DNR	1	1

The APPTG were delighted that 70% of Trusts indicated in the audit that they undertook a documented mandatory risk assessment for all hospitalised patients, using either an individualised opt in or group specific opt out approach. This is in line with both the CMO's April 2007 recommendations and NICE Clincial Guideline 46.

This demonstrates great progress since the APPTG last audited Acute NHS Hospital Trusts in 2007[5]. Last year, only one-third of Trusts indicated they were undertaking a documented mandatory risk assessment for all hospitalised patients[6]. The 2005 Health Select Committee identified that hospital-acquired DVT kills more than five times the number of patients as hospital-acquired infections therefore we were concerned that two-thirds of Trusts were not taking action to prevent hospital-acquired DVT.

However, it is worrying to see that 21% of Trusts are not risk assessing either high risk surgical patients as it goes against NICE clinical guideline 46 which clearly states that '(surgical) patients should be assessed to identify their risk factors for developing venous thromboembolism[7]'. The CMO states in his recommendations that 'all medical patients should, as part of a mandatory risk assessment, be considered for thromboprophylaxis measures[8].' Despite this, 16% of Trusts indicated that they were not carrying out a risk assessment for all high risk medical patients. 10% are not universally risk assessing any of these groups of patients.

[5] All-Party Parliamentary Thrombosis Group (APPTG) VTE Research Report, November 19 2007.
[6] All-Party Parliamentary Thrombosis Group (APPTG) VTE Research Report, November 19 2007.
[7] NICE clinical guideline 46: 'Venous thromboembolism: reducing the risk of venous thromboembolism in inpatients undergoing surgery) p.6. Available at: http://www.nice.org.uk/nicemedia/pdf/CG046NICEguideline.pdf
[8] Donaldson, L. 2007. Recommendations of the expert working group on the prevention of venous thromboembolism (VTE) in hospitalised patients. Department of Health p. 7 Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073944

6. If you answer no to any of the groups mentioned in question 5, what do you see as the perceived difficulties of undertaking a documented mandatory risk assessment of every hospital in-patient?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
COST	14	33
LACK OF RISK ASSESSMENT TOOL	18	43
LACK OF CLINICAL LEADERSHIP/ CHAMPION WITHIN TRUST	11	26
STAFF TRAINING	26	62
LACK OF EVIDENCE BASE	23	55

Of the 30% of Trusts that indicated that they were not risk assessing all hospital in-patients for DVT, staff training was perceived to be the biggest barrier to implementing DVT risk assessment, followed by the lack of an evidence base. 43% noted the lack of a risk-assessment tool as a barrier to carrying out risk assessment for all hospitalised patients.

However, on 19 September 2008, the Department of Health published the DVT Risk Assessment Tool. This should assist Trusts in implementing risk assessment for thomboprophylaxis for all hospitalised patients and make a difference to the number of Trusts who are universally risk assessing all hospital inpatients in the next year.

The majority of those who were not risk assessing explained that they were in the process of implementing a risk assessment strategy for all hospital patients. Many also felt that their lack of manpower and in particular a specialist anticoagulation nurse has also impeded their ability to achieve this.

Managing hospital-acquired DVT

7a. Does your Trust have in place a multi-disciplinary thrombosis committee / team responsible for the management of patients with VTE in line with the CMO and NICE's recommendations?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	118	86
NO	19	14
DNR	1	>1

Last year, the APPTG were disappointed that only 57% of respondents indicated that they had a multidisciplinary thrombosis committee / team[9]. This is despite the Health Select Committee stating in its 2005 report that its most important recommendation was *'thrombosis committees and teams should be established in each hospital to promote best practice now[10]'*. This was reiterated by the CMO and NICE in their April 2007 recommendations.

> " Our most important recommendation is that thrombosis committees and thrombosis teams should be established in each hospital to promote best practice now. "
>
> House of Commons Health Select Committee, 2005

We are pleased to see that now, 86% of Trusts have a multi-disciplinary thrombosis committee / team responsible for the management of patients with DVT in line with the CMO and NICE's recommendations. We also asked Trusts to indicate who this committee / team was comprised of to gain an idea of how responsibility for this issue was shared. The majority indicated that doctors, nurses and pharmacists were part of these groups as well as clinical governance, patient safety managers and patient representatives in some Trusts.

[9] All-Party Parliamentary Thrombosis Group (APPTG) VTE Research Report, November 19 2007.
[10] House of Commons Health Committee. 2005. The Prevention of Thromboembolism in Hospitalised Patients. Second Report. Session 2004-2005. Page 3. Available at http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

> " I am embarrassed by the limited progress in our Trust until now. However, we have now set up a thrombosis committee with strong clinical engagement and I expect significant progress in forthcoming months. "
>
> Acute NHS Trusts, West Midlands SHA

7b. Barriers for those without a thrombosis committee / team?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
LACK OF CLINICAL LEADERSHIP /CHAMPION WITHIN TRUST	6	32
LACK OF MANAGERIAL SUPPORT	3	16
TIME/SCHEDULE CONSTRAINTS	13	68
COST	1	5
OTHER	3	16

Of the 14% who indicated that they did not have a multidisciplinary thrombosis team / committee the main barrier was perceived to be *'time / schedule' constraints or the 'lack of clinical leadership / champion within Trust.'* Where Trusts stated 'other' many explained that they were in process of setting one up or taking action to address this matter. Only one Trust indicated that they did not feel a committee / team would be of value.

Methods and audit of thrombo-prophylaxis

8a. Does your Trust use any of the following methods of thomboprophylaxis in surgical patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
PHARMACOLOGICAL PROPHYLAXIS	138	100
INTERMITTENT PNEUMATIC COMPRESSION	118	86
ANTI-EMBOLISM STOCKINGS	138	100

The response indicates that all Trusts are using the methods of thromboprophylaxis for surgical patients as indicated by the NICE guidelines and CMO recommendations. These both acknowledge that patients undergoing surgery with increased risk of DVT because they have risk factors should be offered pharmacological prophylaxis. All surgical patients admitted to hospital should be recommended anti-embolism stockings and intermittent pneumatic compression should be used instead of, or in addition to, compression stockings whilst patients are in hospital[11].

8b. Does your Trust use any of the following methods of thomboprophylaxis in medical patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
PHARMACOLOGICAL PROPHYLAXIS	133	96
INTERMITTENT PNEUMATIC COMPRESSION	15	11
ANTI-EMBOLISM STOCKINGS	122	88

The NICE guidelines on the prevention of DVT in medical patients, expected to be published in September 2009, will clarify the preferred methods for prophylaxis in medical patients. However, the CMO acknowledged the efficacy of pharmacological prophyalxis and recommended that at-risk medical patients should be considered for these on admission to hospital. We were pleased that no Trust indicated that they used aspirin for medical patients as they had done the previous year, given that the CMO specifies aspirin is not recommended for thromboprophylaxis in medical patients.

[11] NICE clinical guideline 46: 'Venous thromboembolism: reducing the risk of venous thromboembolism in inpatients undergoing surgery) p.6. Available at: http://www.nice.org.uk/nicemedia/pdf/CG046NICEguideline.pdf

9a. Does your Trust regularly audit the uptake of risk assessment for VTE?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	101	73
NO	37	27

9b. Does your Trust regularly audit levels of prescribing of thromboprophylaxis in patients?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	100	72
NO	38	28

10. Does your Trust currently audit thromboprophyalxis across different specialities within the Trust?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	109	80
NO	28	20
DNR	1	1

The fact that over 73% of Trusts are regularly auditing uptake of risk assessment and their prescribing of thromboprophylaxis in patients is a good indication that the 70% of Trusts who are risk assessing all hospital inpatients for DVT are doing so effectively.

It is clear from our figures for risk assessment that for those Trusts who indicated that they were not auditing, it is because they do not have the policy or protocols at present to audit against.

Many of those Trusts who do not regularly audit uptake of risk assessment or levels of prescribing thromboprophylaxis, indicated that resource issues (time, staff and money) were the main barrier to doing so but ad hoc audits had taken place.

Education

11a. What format does your Trust offer programmes of education / CPD to pharmacists, medical and nursing staff on risk assessment?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
QUICK REFERENCE EG. POCKET CARD	47	34
ELECTRONIC	68	49
WRITTEN	78	57
NOT OFFERED	17	12
OTHER	58	42

11b. What format does your Trust offer programmes of education / CPD to pharmacists, medical and nursing staff on thromboprophyalxis?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
QUICK REFERENCE EG. POCKET CARD	48	35
ELECTRONIC	74	54
WRITTEN	77	56
NOT OFFERED	14	10
OTHER	47	34
DNR	1	1

> " The whole issue of thromboprophylaxis needs to be raised within medical schools so that junior doctors try to implement this from their first day of postgraduate working lives. "
>
> Acute NHS Trust, South West SHA

In 2005, the Health Select Committee report into the prevention of hospital-acquired DVT concluded that "the current variations in the administration of thromboprophylaxis indicate that surgeons and physicians are unaware of the extent of hospital-acquired DVT and how readily and safely it can be prevented[12]."

It is evident from this question that Trusts have addressed this as 87% of Trusts are offering staff some form of training on thrombosis risk assessment and 93% of Trusts are making available education to staff on thromboprophylaxis. The quality and availability of these programmes cannot be evaluated by this question but Trusts are clearly making efforts to ensure their staff have some access to education on thrombosis risk assessment and thromboprophylaxis. This has clearly contributed to improved uptake of risk assessment in some areas.

Some Trusts indicated other forms of education used. These included modules within junior doctors' curriculum, seminars, lectures, and study days for continued professional development.

12. Do you offer the following patients information on the risks of VTE on admission?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
ALL HOSPITAL IN-PATIENT	33	24
HIGH RISK SURGICAL PATIENTS ONLY	66	48
HIGH RISK MEDICAL PATIENTS ONLY	24	17
OUT-PATIENTS	13	9
NONE	33	24

13. Do you offer the following patients information on the risks of VTE on discharge?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
ALL HOSPITAL IN-PATIENT	24	17
HIGH RISK SURGICAL PATIENTS ONLY	60	43
HIGH RISK MEDICAL PATIENTS ONLY	2	1
OUT-PATIENTS	6	4
NONE	51	37

[12] House of Commons Health Committee. 2005. The Prevention of Thromboembolism in Hospitalised Patients. Second Report. Session 2004-2005. Page 19. Available at http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

Despite the vast improvement on the number of Trusts implementing DVT risk assessment, few Trusts do not consider improving patients' awareness about the risks of hospital–acquired DVT and thromboprophylaxis a priority. Only 24% of Trusts offer all hospital inpatients information on admission and 18% on discharge, with 10% not offering any information to patients on admission or discharge. This is clearly compounding low patient and public awareness of the risks of hospital-acquired DVT. From the answers to question 18, many Trusts clearly think that responsibility for this lies with central government.

NICE clinical guideline 46 emphasised the need for 'good communication between healthcare professionals and patients,' recommending that before surgery, both verbal and written information should be provided on the risks of hospital-acquired DVT and the effectiveness of both pharmacological and mechanical prophylaxis [13]. The Health Select Committee and the CMO's Expert Working Group also came to the same conclusion. However, only 48% of Trusts are currently offering this information to high risk surgical patients on admission. NICE clinical guideline 46 also recommends that as part of a surgical patients discharge plan patients should be given verbal and written information on the signs and symptoms of DVT and PE, the correct use of prophylaxis at home and the implications of not using prophylaxis correctly[14]. However, only 43% of Trusts were able to say that they offered this to high risk surgical patients on discharge. The CMO also acknowledged the need for improved communication between professionals and patients.

Of those Trusts that did not provide information on admission and discharge, many explained that they were in the process of rolling out leaflets or that they had plans to implement these in the next twelve months. Clearly, some of these Trusts provide literature or verbal advice on an ad-hoc basis which is not integrated into Trust policy. There were a few Trusts, however, that stated it was not their policy to distribute this information to patients. One Trust also felt that they could not distribute this information without causing anxiety to patients.

[13] NICE clinical guideline 46: 'Venous thromboembolism: reducing the risk of venous thromboembolism in inpatients undergoing surgery) p.6. Available at: http://www.nice.org.uk/nicemedia/pdf/CG046NICEguideline.pdf
[14] NICE clinical guideline 46: 'Venous thromboembolism: reducing the risk of venous thromboembolism in inpatients undergoing surgery) p.6. Available at: http://www.nice.org.uk/nicemedia/pdf/CG046NICEguideline.pdf

Occurrence of hospital-acquired DVT

14. How many patients in your Trust have suffered a VTE whilst a hospital in-patient and after admission, in each year?

15. How many patients in your trust were readmitted with VTE following an elective hospital admission in each year?

The majority of Trusts were unable to answer either of these questions as they found the information too difficult to extract and report with any accuracy, suggesting that hospital-acquired DVT is still widely under-reported. This provides a strong argument for a new admissions code for thrombosis which would allow both Trust managers and the Department of Health to track the number of cases of hospital-acquired DVT.

16. Do you record instances of VTE on a venous thromboembolism registry?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	32	23
NO	105	76
DNR	1	1

17. Do you feel a Department of Health venous thromboembolism registry would encourage better reporting of VTE episodes?

Response	Number of Acute Hospital Trusts	% of responding Acute Hospital Trusts
YES	102	74
NO	31	22
DNR	5	4

Whilst 23% of Trusts indicated in question 16 that they currently record instances of DVT on a venous thromboembolism registry, there was wide support for a Department of Health venous thromboembolism registry with 74% expressing that they felt it would encourage better reporting.

As described by the CMO, hospital-acquired DVT is often clinically silent. Unless a post-mortem takes place, a pulmonary embolism will normally be diagnosed as some other form of cardiovascular death such as a heart attack. With the reduction in post-mortems due to the concerns surrounding high profile of organ retention without consent, such as at Alder Hey and the lack of coroners demanding thorough investigations, the result of death is frequently not being determined, contributing to a lack of awareness of the scale of deaths and morbidity from hospital-acquired DVT.

As one consultant from the East Midlands pointed out, 'patients readmitted with DVT following surgery are admitted under a physician; the surgical team are not informed and usually only find out about the admission if the patient dies.' This is the case for many Trusts across the Country. A better coding system or a well-supported Department of Health registry would enable the true scale of hospital-acquired DVT to be captured and enable health care professionals to understand the rationale behind universal DVT risk assessment.

However, some Trusts expressed concerns that this could not be maintained without more personnel for data entry.

> " A registry is an excellent idea. It would lead to better reporting of VTE, allowing data such as that requested to be easily obtained. Secondly, such a registry would allow trends in VTE to be monitored, both at national and local levels. "
>
> Acute NHS Trust, London SHA

Government Direction

18. In your opinion, what Department of Health incentives or assistance would make the risk assessment of all hospital patients more likely to be undertaken?

There was praise for the action the Government and the Department of Health had taken to date to raise the issue of the prevention of hospital-acquired DVT within Trusts. However, many felt that there was still a long way to go before the goal of DVT risk assessment for all hospitalised patients is achieved.

Trusts felt that the Department of Health needed to take action to improve professional, public and patient awareness of the risks of hospital-acquired DVT in order that greater priority is given to its prevention. As some respondents recognised, hospital-acquired DVT kills many times more patients that hospital-acquired infections yet, until now it has had a relatively low profile with both healthcare professionals and patients.

> " Front-line staff remain unaware of need to risk assess all hospitalised patients. This message needs reinforcing by a formal announcement at a national level. With competing demands this will only happen if this is considered mandatory by front line staff. "
>
> Acute NHS Trust, East of England SHA

To date, it is evident that the majority of policy change within Trusts has been driven by DVT champions, usually a consultant haematologist. As the respondent identified, DVT prevention needs to be a concern for all, not just haematologists: *"The importance of this [hospital-acquired DVT] has not filtered down to frontline staff. We need a formal announcement that risk assessment of ALL hospitalised patients is mandatory."* An overwhelming number of Trusts echoed this consultant's sentiments as mandating risk assessment will not only incentivise those Trusts not currently risk assessing all hospitalised patients, but ensure that those Trusts who are risk assessing continue to do so.

A number of Trusts suggested that the way to mandate risk assessment by making DVT risk assessment an indicator in its annual health check. One consultant in the North West commented that DVT risk assessment "would be many times more relevant than many of the 'standards' currently in the health check." The Healthcare Commission noted in response to its 2008/09 consultation they were looking into making DVT risk assessment an indicator. Respondents felt that this would be the incentive for Trust management to act.

> " Make it a standard in the Healthcare Commission Annual Health Check – it would be many times more relevant than many of the 'standards' currently in the health check. "

Acute NHS Trust, North West SHA

Trust respondents also felt that there was a role for PCTs to play through commissioning direct resources for DVT management for their Acute NHS Trusts and scrutinising their efficacy in preventing this.

As we found in our 2007 report, for many Trusts, patient and public education remains a priority and something they look to the Department of Health for assistance with. If Trusts were confronted with public demand for risk-assessment in the same way that they are asked to 'wash their hands,' this could improve the uptake of DVT risk assessment. Here they felt the Department of Health had a role to play by driving a media campaign highlighting the risks of hospital-acquired DVT and encouraging patients to discuss thromboprophylaxis with their health care professionals.

> " Increasing public awareness is paramount to help drive responsible VTE risk management. "

Acute NHS Trust, South Central SHA

There was widespread acceptance of the recently published Department of Health risk assessment tool which has evidently cut-out some of the work for Trusts trying to implement recommended DVT management protocols. However, some respondents felt that the Department of Health could go further by mandating this tool to avoid health care professionals having to re-learn systems every time they move. This is of particular relevance for junior doctors when they are on rotation. It was also felt that the Department of Health should develop national resources for Trusts, in particular educational materials for staff designed for flexible delivery such as podcasts and e-modules on thrombosis management. As was expressed last year, many Trusts felt that a national patient information leaflet that could be amended for local needs would avoid unnecessary duplication of work and improve communication between professionals and patients on the risks of hospital-acquired DVT.

Although many Trusts indicated that they need more financial support and staffing support to ensure universal DVT risk assessment for hospital inpatients, effective management and audit, as was recognised in the CMO's April 2007 recommendations, there is likely to be a clear cost benefit to NHS Trusts if DVT is effectively managed. The CMO's Expert Working Group noted from discussions with the NHS Litigation Authority (NHSLA), in the last ten years, around £68 million has been paid or is outstanding for hospital-acquired DVT claims[15]. Furthermore, the US Health Agency for Research and Quality ranked routine thromboprophylaxis for at risk patients as the number one most important safety practice in the America, based upon the effectiveness of the intervention and the cost-effectiveness of applying that intervention[16].

[15] Donaldson, L. 2007. Recommendations of the expert working group on the prevention of venous thromboembolism (VTE) in hospitalised patients. Department of Health p. 12 Available at:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073944

[16] House of Commons Health Committee. 2005. The Prevention of Thromboembolism in Hospitalised Patients. Second Report. Session 2004-2005. Available at http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

Conclusion: one year on

This year's survey results certainly appear to identify a positive attitudinal change towards DVT risk assessment, with **70% of Acute NHS Trusts declaring that they are now undertaking a documented risk assessment** for all hospital inpatients in line with the CMO's recommendations. This is a significant improvement on last year's results and the recent publication of the Department of Health risk assessment tool is likely to reinforce the validity of this figure. Yet this should come as no surprise considering recommendations from the CMO and NICE have been in the public domain for over 18 months.

The commitment by Trusts to prioritise the management of hospital-acquired DVT is also demonstrated by the increased rate of Trusts declaring the existence of a multi-disciplinary thrombosis committee as recommended by the CMO and the Health Select Committee.

However, it remains disappointing that one third of patients are still not receiving a risk assessment for DVT despite the CMO having written to healthcare professionals throughout the NHS endorsing his expert working group recommendations that all medical patients should, as part of a mandatory risk assessment, be considered for thromboprophylaxis (blood clot prevention) measures.

Our survey also identified that only **24% of Trusts offer patients information on the risks of thrombosis** when they enter hospital. This is despite NICE, the House of Commons Health Select Committee and the CMO and his Expert Working Group all emphasising the need for 'good communication [about DVT] between healthcare professionals and patients'[17].

The majority of the Trust respondents had difficulties identifying how many patients acquire DVT as a result of a hospital stay and how many patients have to be readmitted as result. This suggests that many Trusts are still not aware of the true scale of the problem which creates difficulties of DVT champions to outline a robust business case for extra resource to implement DVT prevention protocols in the Trust.

[17] The Prevention of VenousThromboembolism in Hospitalised Patients, Second Report of Session 2004–05, February 2005 , p.7. Available at: http://www.publications.parliament.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

In their responses to this year's survey, many Trusts felt the Department of Health needed to take action to improve professional, public and patient awareness of the risks of hospital-acquired DVT. Some respondents recognised that the condition kills many times more patients than hospital-acquired infections yet, until now, it has had a relatively low profile with both healthcare professionals and patients.

Whilst the improved figures on risk assessment demonstrate a marked improvement in attitudes towards DVT prevention, we remain of the view that long term success will only be secured by mandating risk assessment in the NHS and auditing Trust compliance. An overwhelming number of Trusts echoed this sentiment, concluding that mandating risk assessment will not only incentivise those Trusts not currently risk assessing patients, but to ensure that those Trusts who are risk assessing continue to do so in the long term future.

Trust respondents recommended DVT risk assessment be introduced as an indicator in the annual Healthcare Commission Health Check, with one consultant adding that DVT risk assessment *"would be many times more relevant than many of the 'standards' currently in the health check"*.

This is nothing new to Government as in 2006, former Health Minister Caroline Flint MP endorsed the calls of the Health Select Committee for Trust's compliance with DVT risk assessment as an indicator in the Healthcare Commission's annual hospital Health Check. At the beginning of November 2008, Ann Keen MP, Parliamentary Under Secretary of State for Health confirmed that Government would seek to mandate risk assessment if the practice was still 'patchy'. This year's survey certainly identifies that, with a third of patients in England still not receiving a documented risk assessment upon admission.

The Department of Health and Government must be congratulated for its efforts to date. However, the APPTG reiterates its call on the Department of Health to stand up to its commitment to reducing deaths from DVT by mandating DVT risk assessment as an audited indicator in the annual Hospital Health Check. To support this, we believe that it is vital to introduce a hospital-acquired DVTadmission code in secondary care to effectively track cases and to show the true extent of the problem to healthcare professionals first hand.

Further Information

Chief Medical Officer, Sir Liam Donaldson's letter announcing the publication of the VTE Implementation Working Group's Risk Assessment Tool:

http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletters/DH_088222

VTE Implementation Working Group Risk Assessment Tool:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_088215

NICE clinical guidelines 46 'Venous thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery)

http://www.nice.org.uk/nicemedia/pdf/CG046NICEguideline.pdf

Chief Medical Officer, Sir Liam Donaldson's letter announcing the recommendations of the expert working group on the prevention of venous thromboembolism in hospitalised patients:

http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletters/DH_073957

Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073944

House of Commons Health Committee Report on the prevention of Venous Thromboembolism in Hospitalised Patients – Second Report of Session 2004-2005:

http://www.parliament.the-stationery-office.co.uk/pa/cm200405/cmselect/cmhealth/99/99.pdf

Government Response to the House of Commons Health Committee Report on the Prevention of Venous Thromboembolism in Hospitalised Patients - Second Report of Session 2004-05:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4116284

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Appendix I

LETTER AND SURVEY

27 August 2008

Chief Exceutive

Dear Chief Executive,

The All-Party Parliamentary Thrombosis Group (APPTG) is conducting an audit into the uptake of best practice recommendations on the prevention of venous thromboembolism (VTE) in hospitalised patients, in line with the Chief Medical Officer's (CMO) Expert Working Group's recommendations and NICE Clinical Guideline 46, both published in April 2007. This audit will form part of a report to Parliament.

As you may remember, the APPTG undertook a survey last year to assess whether these recommendations and guidelines were being implemented by Acute Hospital Trusts.

Whilst it was encouraging that 99% of Acute Hospital Trusts were aware of Department of Health best practice guidelines, the APPTG was concerned that only one third of Trusts indicated that they were following these guidelines and undertaking a documented risk assessment for all hospital in-patients. It is estimated that that 10% of hospital mortality can be attributed to VTE, but many of these deaths could be avoided with appropriate management and preventive treatment.

It is in the interests of patients and the NHS that these recommendations are fully implemented and adhered to. Given this, the APPTG looks forward to learning what progress has been made in the twelve months since our last audit and to establish how the Department of Health could assist universal uptake of VTE best practice guidelines.

I would be grateful if you would complete the enclosed questionnaire and return it by **10th October 2008 to the APPTG secretariat**.

You or a representative from your Trust are also invited to the launch of the report which will take place at a half day conference in Parliament on **Thursday 20th November 2008**. An invitation and more details of the structure of the day will follow shortly.

I thank you in advance for your support with this survey which will be invaluable to the campaign to prevent further avoidable deaths from thrombosis in hospital.

Yours faithfully,

John Smith MP
Chairman, All-Party Parliamentary Thrombosis Group
cc. Medical Director

ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP

August 2008

Survey into the uptake of CMO & NICE guidance into the prevention of venous thromboembolism in hospitalised patients

Please note that the deadline for responses is Friday 10th October 2008

Name:

Position:

NHS Trust:

Contact Number: **Email:**

An electronic copy of this survey is available on request from the All-Party Parliamentary Thrombosis Group secretariat

Once completed, please return this survey to the All-Party Parliamentary Thrombosis Group secretariat:

All-Party Parliamentary Thrombosis Group Secretariat
c/o Insight PA
The Garden House
6 Eccleston Place
London
SW1W 9NE

Tel: **020 7824 1867**
Fax: **020 7824 1851**
Email: **nadia@insightpa.com**

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1. Is your NHS Trust aware of the Chief Medical Officer's (CMO) recommendations on the prevention of venous thromboembolism (VTE) and NICE clinical guideline 46, both published on 19 April 2007?

☐ Yes ☐ No

2. Who in your NHS Trust is responsible for ensuring your clinical staff are made aware of these recommendations and guidelines?

Name: _____ Position: _____

Contact: _____

3. Has your NHS Trust signed up to the National Patient Safety Campaign launched on 19 June 2008?

☐ Yes ☐ No

If your answer is yes please detail which interventions you have signed up to and why:

4. Does your NHS Trust have a written thromboprophylaxis policy(s) or protocol?

☐ Yes ☐ No

5. Does your Trust undertake a documented mandatory risk assessment in line with the CMO and NICE's recommendations of the following:

a) All hospital in-patients:

☐ Yes, using an individualised opt-in approach

☐ Yes, using a group specific opt-out approach

☐ No

b) High risk surgical patients only:

☐ Yes, using an individualised opt-in approach

☐ Yes, using a group specific opt-out approach

☐ No

c) High risk medical patients only:

☐ Yes, using an individualised opt-in approach

☐ Yes, using a group specific opt-out approach

☐ No

d) Out-patients:

☐ Yes, using an individualised opt-in approach

☐ Yes, using a group specific opt-out approach

☐ No

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6. If you answered no to any of the groups mentioned in question 5, what do you see as the perceived difficulties of undertaking a documented mandatory risk assessment of every hospital in-patient:

- ☐ Cost
- ☐ Lack of risk-assessment tool
- ☐ Lack of clinical leadership/champion within Trust
- ☐ Staff Training
- ☐ Lack of evidence base
- ☐ Other (please specify) _____

7. Does your Trust have in place a multi-disciplinary thrombosis committee/team responsible for the management of patients with VTE in line with the CMO and NICE's recommendations?

a) ☐ **Yes**

If you do have a multi-disciplinary thrombosis committee/team, please indicate which staff are involved:

- ☐ Doctors
- ☐ Nurses
- ☐ Pharmacists
- ☐ Diagnosticians
- ☐ Other (please specify) _____

b) ☐ **No**

If not, please indicate why:

☐ Lack of clinical leadership/champion within trust

☐ Lack of managerial support

☐ Time/schedule constraints

☐ Cost

☐ Other (please specify)_____

8. **Does your Trust use any of the following methods of thromboprophylaxis?** (Please tick all that apply)

a) **Pharmacological prophylaxis**

☐ Surgical ☐ Medical

b) **Intermittent pneumatic compression**

☐ Surgical ☐ Medical

c) **Anti-embolism stockings**

☐ Surgical ☐ Medical

Other (please specify) _____

9. **Does your Trust regularly audit the following:**

a) **Uptake of risk-assessment for VTE?**

☐ Yes ☐ No

If your answer is no, please state why:

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b) Levels of prescribing of thromboprophylaxis in patients?

☐ Yes ☐ No

If your answer is no, please state why:

10. Does your Trust currently audit thromoboprophylaxis across different specialities within the trust?

☐ Yes ☐ No

11. What format does your Trust offer programmes of education / CPD to pharmacists, medical and nursing staff:

a) Risk assessment of VTE

☐ Quick reference e.g. pocket card

☐ Electronic

☐ Written

☐ Not offered

☐ Other (please specify)_____

b) Thromboprophylaxis

- ☐ Quick reference e.g. pocket card
- ☐ Electronic
- ☐ Written
- ☐ Not offered
- ☐ Other (please specify) _____

If your answer is no, please state why:

12. Do you offer the following patients information of the risks of VTE on admission:

- ☐ All hospital in-patients
- ☐ High risk surgical patients only
- ☐ High risk medical patients only
- ☐ Out-patients
- ☐ None

If you do not offer all hospital in-patients information on the risks of VTE on admission, please state why:

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13. Do you offer the following patients information of the risks of VTE on discharge:

- ☐ All hospital in-patients
- ☐ High risk surgical patients only
- ☐ High risk medical patients only
- ☐ Out-patients
- ☐ None

If you do not offer all hospital in-patients information on the risks of VTE on discharge, please state why:

14. How many patients in your Trust have suffered a VTE whilst a hospital in-patient and after admission, in each year?

- ☐ 2005/6
- ☐ 2006/7
- ☐ 2007/08

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15. How many patients in your trust were readmitted with VTE following an elective hospital admission in each year?

	2005/6
	2006/7
	2007/08

16. Do you record instances of VTE on a venous thromboembolism registry?

☐ Yes ☐ No

17. Do you feel a Department of Health venous thromboembolism registry would encourage better reporting of VTE episodes?

☐ Yes ☐ No

Please use this space for any comments you wish to make:

ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP

18. In your opinion, what Department of Health incentives or assistance would make the risk assessment of all hospital patients more likely to be undertaken?

19. Please use the area below for any other comments you wish to make:

Appendix 2

Alphabetical List of Acute NHS Hospital Trusts and whether they responded to the APPTG survey

Acute Hospital Trusts	Response
Aintree University Hospitals NHS Foundation Trust	YES
Airedale NHS Trust	YES
Ashford and St Peter's Hospitals NHS Trust	YES
Barking, Havering and Redbridge Hospitals NHS Trust	YES
Barnet and Chase Farm Hospitals NHS Trust	YES
Barnsley Hospital NHS Foundation Trust	YES
Barts and The London NHS Trust	YES
Basildon and Thurrock University Hospitals NHS Foundation Trust	NO
Basingstoke and North Hampshire NHS Foundation Trust	YES
Bedford Hospital NHS Trust	YES
Birmingham Women's Health Care NHS Foundation Trust	YES
Blackpool, Fylde and Wyre Hospitals NHS Trust	YES
Bradford Teaching Hospitals NHS Foundation Trust	YES
Brighton and Sussex University Hospitals NHS Trust	YES
Bromley Hospitals NHS Trust	YES
Buckinghamshire Hospitals NHS Trust	YES
Burton Hospitals NHS Trust	YES
Calderdale and Huddersfield NHS Foundation Trust	YES
Cambridge University Hospitals NHS Foundation Trust	YES
Chelsea and Westminster Hospital NHS Foundation Trust	YES
Chesterfield Royal Hospital NHS Foundation Trust	YES
Christie Hospital NHS Foundation Trust	YES
City Hospitals Sunderland NHS Foundation Trust	YES
Colchester Hospital University NHS Foundation Trust	YES
Countess Of Chester Hospital NHS Foundation Trust	YES
County Durham and Darlington NHS Foundation Trust	NO
Dartford and Gravesham NHS Trust	NO
Derby Hospitals NHS Foundation Trust	YES
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	NO
Dorset County Hospital NHS Foundation Trust	YES
Dudley Group Of Hospitals NHS Trust	YES
Ealing Hospital NHS Trust	YES
East and North Hertfordshire NHS Trust	YES
East Cheshire NHS Trust	YES
East Kent Hospitals NHS Trust	YES
East Lancashire Hospitals NHS Trust	YES
East Sussex Hospitals NHS Trust	NO
Epsom and St Helier University Hospitals NHS Trust	YES
Frimley Park Hospital NHS Foundation Trust	YES

Gateshead Health NHS Foundation Trust	YES
George Eliot Hospital NHS Trust	YES
Gloucestershire Hospitals NHS Foundation Trust	NO
Guy's and St Thomas' NHS Foundation Trust	YES
Hammersmith Hospitals NHS Trust	NO
Harrogate and District NHS Foundation Trust	YES
Heart Of England NHS Foundation Trust	YES
Heatherwood and Wexham Park Hospitals NHS Foundation Trust	YES
Hereford Hospitals NHS Trust	YES
Hinchingbrooke Health Care NHS Trust	YES
Homerton University Hospital NHS Foundation Trust	YES
Hull and East Yorkshire Hospitals NHS Trust	YES
Imperial College Healthcare Trust	YES
Ipswich Hospital NHS Trust	YES
Isle Of Wight NHS PCT	YES
James Paget University Hospitals NHS Foundation Trust	YES
Kettering General Hospital NHS Trust	YES
King's College Hospital NHS Foundation Trust	YES
Kingston Hospital NHS Trust	NO
Lancashire Teaching Hospitals NHS Foundation Trust	YES
Leeds Teaching Hospitals NHS Trust	YES
Liverpool Women's NHS Foundation Trust	YES
Luton and Dunstable Hospital NHS Foundation Trust	YES
Maidstone and Tunbridge Wells NHS Trust	NO
Mayday Healthcare NHS Trust	NO
Medway NHS Trust	YES
Mid Cheshire Hospitals NHS Trust	YES
Mid Essex Hospital Services NHS Trust	YES
Mid Staffordshire General Hospitals NHS Trust	YES
Mid Yorkshire Hospitals NHS Trust	YES
Milton Keynes General Hospital NHS Trust	YES
Newcastle Upon Tyne Hospitals NHS Foundation Trust	YES
Newham University Hospital NHS Trust	YES
Norfolk and Norwich University Hospital NHS Trust	YES
North Bristol NHS Trust	NO
North Cheshire Hospitals NHS Trust	YES
North Cumbria Acute Hospitals NHS Trust	NO
North Middlesex University Hospital NHS Trust	YES
North Tees and Hartlepool NHS Trust	YES
North West London Hospitals NHS Trust	YES
Northampton General Hospital NHS Trust	YES
Northern Devon Healthcare NHS Trust	YES
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	YES

Northumbria Healthcare NHS Foundation Trust	YES
Nottingham University Hospitals NHS Trust	NO
Nuffield Orthopaedic Centre NHS Trust	YES
Oxford Radcliffe Hospitals NHS Trust	YES
Papworth Hospital NHS Foundation Trust	YES
Pennine Acute Hospitals NHS Trust	YES
Peterborough and Stamford Hospitals NHS Foundation Trust	NO
Plymouth Hospitals NHS Trust	YES
Poole Hospital NHS Trust	YES
Portsmouth Hospitals NHS Trust	YES
Queen Elizabeth Hospital NHS Trust	NO
Queen Mary's Sidcup NHS Trust	YES
Queen Victoria Hospital NHS Foundation Trust	YES
Robert Jones and Agnes Hunt Orthopaedic and District Hospital NHS Trust	NO
Royal Berkshire NHS Foundation Trust	YES
Royal Bolton Hospitals NHS Trust	YES
Royal Brompton and Harefield NHS Trust	YES
Royal Cornwall Hospitals NHS Trust	YES
Royal Devon and Exeter NHS Foundation Trust	NO
Royal Free Hampstead NHS Trust	YES
Royal Liverpool and Broadgreen University Hospitals NHS Trust	YES
Royal National Hospital For Rheumatic Diseases NHS Foundation Trust	NO
Royal National Orthopaedic Hospital NHS Trust	NO
Royal Surrey County Hospital NHS Trust	YES
Royal United Hospital Bath NHS Trust	YES
Royal West Sussex NHS Trust	YES
Salford Royal NHS Trust	YES
Salisbury NHS Foundation Trust	YES
Sandwell and West Birmingham Hospitals NHS Trust	YES
Scarborough and North East Yorkshire Health Care NHS Trust	YES
Sheffield Teaching Hospitals NHS Foundation Trust	YES
Sherwood Forest Hospitals NHS Foundation Trust	NO
Shrewsbury and Telford Hospital NHS Trust	YES
South Devon Healthcare NHS Foundation Trust	YES
South Tees Hospitals NHS Trust	YES
South Tyneside NHS Foundation Trust	NO
South Warwickshire General Hospitals NHS Trust	YES
Southampton University Hospitals NHS Trust	YES
Southend University Hospital NHS Foundation Trust	YES
Southport and Ormskirk Hospital NHS Trust	YES
St George's Healthcare NHS Trust	YES

St Helens and Knowsley Hospitals NHS Trust	YES
St Mary's NHS Trust	NO
Stockport NHS Foundation Trust	YES
Surrey and Sussex Healthcare NHS Trust	YES
Swindon and Marlborough NHS Trust	YES
Tameside and Glossop Acute Services NHS Trust	YES
Taunton and Somerset NHS Trust	YES
The Cardiothoracic Centre - Liverpool NHS Trust	YES
The Hillingdon Hospital NHS Trust	YES
The Lewisham Hospital NHS Trust	YES
The Princess Alexandra Hospital NHS Trust	YES
The Queen Elizabeth Hospital King's Lynn NHS Trust	YES
The Rotherham NHS Foundation Trust	YES
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	YES
The Royal Marsden NHS Foundation Trust	YES
The Royal Orthopaedic Hospital NHS Foundation Trust	NO
The Royal Wolverhampton Hospitals NHS Trust	NO
The Whittington Hospital NHS Trust	YES
Trafford Healthcare NHS Trust	YES
United Bristol Healthcare NHS Trust	YES
United Lincolnshire Hospitals NHS Trust	YES
University College London Hospitals NHS Foundation Trust	YES
University Hospital Birmingham NHS Foundation Trust	YES
University Hospital Of North Staffordshire NHS Trust	YES
University Hospital Of South Manchester NHS Foundation Trust	YES
University Hospitals Coventry and Warwickshire NHS Trust	YES
University Hospitals Of Leicester NHS Trust	YES
University Hospitals Of Morecambe Bay NHS Trust	YES
Walsall Hospitals NHS Trust	NO
Walton Centre For Neurology and Neurosurgery NHS Trust	YES
West Hertfordshire Hospitals NHS Trust	YES
West Middlesex University Hospital NHS Trust	YES
West Suffolk Hospitals NHS Trust	YES
Weston Area Health NHS Trust	NO
Whipps Cross University Hospital NHS Trust	YES
Winchester and Eastleigh Healthcare NHS Trust	YES
Wirral University Teaching Hospital NHS Foundation Trust	YES
Worcestershire Acute Hospitals NHS Trust	YES
Worthing and Southlands Hospitals NHS Trust	NO
Wrightington, Wigan and Leigh NHS Trust	YES
Yeovil District Hospital NHS Foundation Trust	YES
York Hospitals NHS Foundation Trust	YES

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APPTG SECRETARIAT AND FUNDING

This report was undertaken by the APPTG secretariat in consultation with Lifeblood: The Thrombosis Charity.

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