





ALL-PARTY PARLIAMENTARY THROMBOSIS GROUP (APPTG) **SURVEY RESULTS 2018**

www.apptg.org.uk

CONTENTS

Chair's Foreword: Lyn Brown MP	4
Summary of Findings	5
VTE Risk Assessment, Diagnosis and Management	6
a) VTE risk assessment	6
b) VTE diagnosis and management	7
Hospital Associated Thrombosis	8
a) Occurrence of hospital associated thrombosis	8
b) Root Cause Analysis	10
Admission to Hospital for VTE	12
Mandating best practice	14
a) Local incentive schemes	4
b) Local cost ofVTE	15
Patient Information	16
Conclusion	17
APPTG recommendations for 2019	18
Further Information	19
Contact Details	19





Venous thromboembolism (VTE) is a condition in which a thrombus – a blood clot – forms in a vein. Usually, this occurs in the deep veins of the legs and pelvis and is known as deep vein thrombosis (DVT). The thrombus or parts of it can break off, travel in the blood system and eventually block an artery in the lung. This is known as a pulmonary embolism (PE). VTE is a collective term for both DVT and PE.

With an estimated incidence rate of 1-2 per 1,000 of the population,VTE is a significant cause of mortality and disability in England with thousands of deaths directly attributed to it each year. One in twenty people will have VTE during their lifetime and more than half of those events are associated with prior hospitalisation. At least two thirds of cases of hospital-associated thrombosis are preventable through VTE risk assessment and the administration of appropriate thromboprophylaxis, however currently VTE is one of the most common forms of hospital mortality.



CHAIR'S FOREWORD

Dear Colleague,

As Chair of the All-Party Parliamentary Thrombosis Group (APPTG), I am delighted to launch our *Annual Review* for 2018.



This year, in the 70th Birthday year of our NHS, Sustainability and Transformation Partnerships (STPs) and Integrated Care Systems (ICSs) have once again been tasked with developing updated healthcare plans for their respective areas. As with previous years, patient safety has been a key concern. This has been reflected by a number of the NHS 10-Year Plan's workstreams, focusing on integrated and personalised care as well as prevention, personal responsibility and health inequalities. There were also developments in VTE management and care, highlighted by the publication of the NICE guideline on *venous thromboembolism in over 1 6s*.

Since the formation of the APPTG, the group has produced annual reports to support the implementation of best practice in VTE prevention and management in the NHS. Drawing on the evidence gathered by our annual survey of Acute Trusts and CCGs, our report provides a comprehensive overview of progress in implementing best practice; identifies areas for future improvement; and offers recommendations on how NHS services can best deliver high quality VTE prevention and management.

The progress that has been made in the field of VTE management and care is to be commended, however, there have been concerns recently that the standards health care professionals have worked so hard to improve and maintain are slipping. Earlier this year the Health Service Journal (HSJ) published an article on the falling number of VTE risk assessments being undertaken at NHS Trusts. This is concerning as risk assessment has been shown to be a cost effective way of reducing levels of mortality in people at risk of VTE.

While last year's survey confirmed that many key national requirements of best practice are firmly embedded in hospitals, this year's survey has illustrated that a number of these national requirements, while remaining high, are starting to slip. For example, Trusts last year were found to risk assess 96% of adult inpatients for VTE, however this has fallen to 95% this year, confirming the findings from the HSJ this May. While the fall may seem small, with Trusts on average meeting the nationally mandated threshold; the figure also hides individual failings across a number of Trusts. This, however, isn't the only area where standards seem to be slipping. Root cause analyses are important as they help to refine the processes undertaken to support patients and ensure that key learning points can be identified. Our survey has shown that once again, the majority of Trusts (60%) have conducted root cause analyses for at least 90% of the total number of recorded Hospital Associated Thrombosis (HAT) occurring in their hospitals in 2017/18. Again though, like other areas of VTE management and care we have seen this year, there has been a decline in the number of root cause analyses taking place, with rates falling by 11% this year.

There is also concern that other important elements of VTE management have failed to improve, with the survey showing that, once again, the average waiting time from first clinical suspicion of VTE to diagnosis is higher than the NICE recommendation that patients suspected of DVT have all diagnostic investigations complete within 24 hours. The average time from diagnosis to first treatment was also high on average, however many Trusts did indicate that once diagnosed they implemented treatment immediately.

This year the APPTG has also conducted an additional review into the cost of VTE at Trust and CCG level, in order to update the estimate published by the Health Select Committee in 2005, which found that VTE costs the NHS £640 million a year to manage. This is an important piece of research, which is necessary to ensure that commissioning high quality care for patients at risk of VTE is maintained.

I do hope that you find the survey results useful and that the information within this report is informative and clear. Please continue to provide the exceptional care and support to your patients that you are all known for and use this resource to help spread awareness of best practice in VTE prevention and management.

Lyn Brown MP, Chair, All-Party Parliamentary Thrombosis Group

SUMMARY OF FINDINGS

9 5%	Acute Trusts on average risk assessed 95% of adult inpatients for VTE in 2017/18. This sits at the national threshold level of 95%. This is a fall of 1% compared with 2016/17 figures.
29.8 hours	The average reported time from first clinical suspicion of VTE to diagnosis was 29.8 hours. NICE recommends that patients suspected of DVT have all diagnostic investigations complete within 24 hours.
135 cases	The average Acute Trust reported 135 cases of hospital associated thrombosis (HAT) in 2017/18.Trusts in the South of England and the Midlands and East of England reported higher than average cases of HAT.
17%	On average, one in six cases of HAT (17%) occurred in patients who were not receiving any thromboprophylaxis. There were four Trusts in which 50% or more of recorded HAT cases were in patients who weren't receiving thromboprophylaxis prior to HAT; three of which exceeded the national threshold to risk assess at least 95% of adult inpatients for VTE.
60%	60% of Trusts indicated that they conducted root cause analyses for at least 90% of the total number of recorded HAT occurring in their hospitals in 2017/18; this is a substantial fall of 11% compared with figures from 2016/17.
Over I/4	Over a quarter (28%) of hospital admissions for VTE were in patients who had a previous inpatient stay of up to 90 days prior to their admission. Among these cases, only 16% included the patient's VTE risk status being displayed on their discharge summary.
9%	On average, 9% of patients admitted to hospital for VTE were care home residents, a figure we have seen increase steadily year-on-year.
63%	The cost of VTE (DVT and PE combined) at CCG level appears to be falling . There has also been an increase in the response rate from CCGs to 63% ; however, response rates from NHS Trusts remain low.
90%	90% of CCGs have clearly mandated in providers' service contracts that failure to comply with best practice in VTE prevention will result in consequences imposed by the CCG.

The results are presented in five sections, examining VTE risk assessment and diagnosis; hospital associated thrombosis; admission to hospital for VTE; mandating VTE best practice; and, patient information. With responses from 105 Trusts and 181 CCGs, we are confident that our survey results represent an accurate picture of activity across England.

VTE RISK ASSESSMENT, DIAGNOSIS AND MANAGEMENT

a) VTE risk assessment

Best practice in VTE prevention has been summarised in NICE Quality Standard 3 (Venous Thromboembolism Prevention Quality Standard), which was issued in June 2010. Following the publication of the updated NICE guideline on venous thromboembolism in over 16s in March 2018, statements 1, 2 and 4 were updated. The Quality Standard provides seven specific, concise quality statements to provide patients, clinicians and healthcare commissioners with a definition of high quality care in VTE prevention.

NICE QUALITY STANDARD 3: VTE PREVENTION				
Statement I	Medical, surgical or trauma patients have their risk of VTE and bleeding assessed using a national tool as soon as possible after admission to hospital.			
Statement 2	Patients who are at increased risk of VTE, are given information about VTE prevention on admission to hospital.			
Statement 3	Patients provided with anti-embolism stockings have them fitted and monitored in accordance with NICE guidance.			
Statement 4	Medical, surgical or trauma patients have their risk of VTE reassessed at consultant review or if their clinical condition changes.			
Statement 5	Patients assessed to be at risk of VTE are offered VTE prophylaxis in accordance with NICE guidance.			
Statement 6	Patients/carers are offered verbal and written information on VTE prevention as part of the discharge process.			
Statement 7	Patients are offered extended (post hospital) VTE prophylaxis in accordance with NICE guidance.			

Since 2014, a National VTE Prevention CQUIN target required Trusts to ensure that 95% of all adult inpatients received a VTE risk assessment on admission to hospital. Since mandating the VTE risk assessment in the UK, the overall death rate associated with VTE has reduced by 15%, with a considerable reduction of death from PE by 80%. As such, this is a crucial part of the overall VTE management and treatment strategy as outlined in the NICE guideline - Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism:

I.I Risk assessment - All patients

1.1.1 Assess all patients to identify the risk of venous thromboembolism (VTE) and bleeding (see recommendation 1.1.2 for all medical patients, 1.1.5 for all surgical patients, 1.1.9 for all pregnant women and all women who gave birth or had a miscarriage or termination of pregnancy in the past 6 weeks, 1.8.1 for all people admitted to the critical care unit and 1.9.1 for all acute psychiatric patients). [2018]

While risk assessment rates have remained above the 95% assessment target, there have been concerns recently that rates are falling, and this was demonstrated this year with a decrease by one percentage point; dropping down to 95.2% in 2017/18. While this again indicates VTE risk assessment is still being maintained to a high standard across NHS Trusts, it does suggest that among some Trusts, standards are slipping. And while the vast majority of Trusts were able to match

or surpass the target of 95%, this masked a number of cases at regional level, with some missing the 95% target by a considerable margin. Overall, 39 Trusts on average missed out on the target of 95% from April 2017 to March 2018. There was also a downward trend, with 35 Trusts missing the target in Q1 (April to June), which increased to 42 in Q4 (January to March).

b) VTE diagnosis and management

A key element of VTE diagnosis and management is the time taken between first clinical suspicions to admission to hospital; this is reflected by a number of guidelines and quality standards which state that patients should be assessed and reassessed within 24 hours. In March 2018, NICE updated the guideline - Venous thromboembolism in over 16s – as part of this; its recommendation for people admitted to hospital indicates that:

1.1.2 Assess all medical patients to identify the risk of VTE and bleeding: As soon as possible after admission to hospital or by the time of the first consultant review

Best practice in VTE diagnosis and management is summarised by NICE Quality Standard 29 (Venous thromboembolism in adults: diagnosis and management). Quality Standard 29, which was issued in March 2013 and updated in April 2016, includes nine statements of best practice.

Statement 2 covers the target time from suspicion of DVT to diagnosis. It specifies that:

"People with suspected deep vein thrombosis have all diagnostic investigations completed within 24 hours of first clinical suspicion."

Our survey asked Trusts what the average time from first clinical suspicion of VTE to diagnosis was for patients diagnosed with VTE between 1 April 2017 and 31 March 2018. Data from NHS Trusts was incomplete in this regard and is not routinely collected; however 45 Trusts were able to respond. Of those able to respond, however, it was found that the average reported time from first clinical suspicion of VTE to diagnosis was 29.8 hours (similar to the figure in last year's report). This ranged widely from 1.6 hours to 171.8 hours. It should be noted that due to low response rate, firm conclusions cannot be drawn from this data; however, it is important to ensure that diagnosis is confirmed and to avoid unnecessary repeat doses of anticoagulants if the diagnosis is excluded.



HOSPITAL ASSOCIATED THROMBOSIS

a) Occurrence of hospital associated thrombosis

Hospital associated thrombosis is one of the leading causes of preventable hospital death. Much has been done to improve this, with NHS England's National Medical Director making the prevention of hospital associated thrombosis (HAT) a top clinical priority. However, up to 60% of VTE cases still occur during or within 90 days of hospitalisation.

Hospital Associated Thrombosis (HAT) is defined as any new episode of VTE diagnosed during hospitalisation or within 90 days of discharge following an inpatient stay of at least twenty four hours.

It has been suggested that the incidence of VTE increases to between 2 and 7 per 1,000 people among those aged \geq 70 years.VTE in hospitalised patients is still known to cause

morbidity and mortality and there are a number of associated risks, including hospital admission for an extended period of time, having surgery or being immobile for long periods of time.

In order to gain a clearer picture of the current burden of HAT in hospitals in England, the APPTG asked Trusts to list the number of confirmed HAT for all four quarters of the period between 1 April 2017 and 31 March 2018. The average Acute Trust reported 135 cases of HAT in 2017/18, an increase of 30 compared with 2016/2017. Trusts in the South of England (135.4) and the Midlands and East of England (139.4) reported higher than average cases of HAT. The number of cases of HAT is consistent throughout the year, with a slight increase from January to March.



b) Use of pharmalogical and mechanical thromboprophylaxis

The risk of venous thrombosis in patients admitted to hospital depends on medical versus surgical admission and, among surgical patients, the type of surgery. However it has often been shown that effective thromboprophylactic measures can reduce the incidence of VTE. This has been highlighted within the guidance below, with NICE guideline on venous thromboembolism in over 16s recommending that:

For medical patients and surgical and trauma patients:

• 1.1.3 - Balance the person's individual risk of VTE against their risk of bleeding when deciding whether to offer pharmacological thromboprophylaxis to medical patients.

For pregnant women and women who gave birth or had a miscarriage or termination of pregnancy in the past 6 weeks:

- 1.1.10 Reassess risk of VTE and bleeding, and assess the need for thromboprophylaxis for all women:
- within 6 hours of giving birth, having a miscarriage or having a termination of pregnancy or
- if their clinical condition changes and they: o are pregnant or
 - o gave birth, had a miscarriage or had a termination of pregnancy within the past 6 weeks. [2018]

This year's survey found that on average, 17% (1 in 6 cases) of HAT cases were in patients who were not receiving thromboprophylaxis prior to HAT, mirroring last year's findings. When looking at the regional breakdown of these statistics, the picture was varied, with the North of England reporting the highest proportion of HAT cases in which patients were not receiving thromboprophylaxis (24.4%), closely followed by London (21.9%), the Midlands and East of England (12.9%) and the South (10.3%). This indicates that Trusts within the South experienced a dramatic improvement on last year's results, dropping almost 14%.

There were six Trusts in which 50% or more of recorded HAT cases were in patients who weren't receiving thromboprophylaxis prior to HAT; two of whom exceeded the national threshold to risk assess at least 95% of adult in patients. Three out of these six Trusts were in the North of England, two were in the Midlands and East region and one was in the South of England. Again this is a marked difference to last year when the South of England dominated.

Given that national and international thromboprophylaxis guidelines have repeatedly recommended thromboprophylaxis for patients admitted to hospital; research has indicated that only 40% to 50% of medical patients and 60% to 75% of surgical patients are currently receiving adequate thromboprophylaxis. It is concerning that there are still persistent levels of variation in regards to whether the guidelines on the use of thromboprophylaxis prior to HAT are followed. This indicates that further work is needed to optimise the process from risk assessment to implementation of preventative measures to reduce the risk of avoidable blood clots.

For example, in a bid to improve medicines optimisation, the Western Sussex NHS Foundation Trust has improved its integration of pharmacists into the MDT at ward level after noticing that many pharmacist interventions followed the same themes, i.e. poor compliance to the Trust VTE prophylaxis guidelines and NICE's CG92 recommendations (now superseded by NG89) for ensuring assessment and prescribing of VTE prophylaxis for all patients takes place as appropriate. The programme has demonstrated the clinical value that pharmacists can bring to the wider MDT. This is particularly the case when it comes to VTE interventions, and ensuring the VTE prophylaxis guidelines are followed correctly.

Elsewhere, the survey also found that on average; 41% of HAT cases occur in surgical patients; 56% of HAT cases occur in general medicine patients; and, 18% of HAT cases occur in cancer patients. That's nearly 1 in 5 and is consistent with levels seen in 2016/17. Again, it is important to ensure that strategies are in place for the prevention of cancer associated thrombosis (CAT).



c) Root Cause Analysis

A Root Cause Analysis (RCA) is an essential element of VTE management and care, as it provides a thorough system of identifying the factors leading to the development of venous thromboembolism (VTE) in a patient. The overall aim is to enable learning from these episodes, which in turn promotes better practice, improves patient safety and reduces the incidence of hospital-acquired thrombosis (HAT).

Service Condition 22 of the NHS Standard Contract 2016/17 outlines that providers must:

"Perform Root Cause Analysis of all confirmed cases of pulmonary embolism and deep vein thrombosis acquired by Service Users while in hospital (both arising during a current hospital stay and where there is a history of hospital admission within the last 3 months, but not in respect of Service Users admitted to hospital with a confirmed venous thromboembolism but no history of an admission to hospital within the previous 3 months)..." The provider is required to report the results of these RCAs to the coordinating commissioner on a monthly basis. This year's survey indicated that across responding Trusts, there were RCA reports for 80% of confirmed HAT in 2017/18, which is positive as there are a number of proven beneficial outcomes of RCA in monitoring of HAT, including the identification of troublesome areas in VTE prevention and increased awareness by clinicians of VTE.

Our survey also asked CCGs how they quality assure that providers are complying with the national obligation to perform RCA of all confirmed cases of HAT.The following graph outlines the responses.

It is encouraging to see that for most Trusts, RCA reporting is now firmly embedded practice. RCA reporting improves understanding of the proportion of adverse events that could be prevented; enables lessons to be learned from individual episodes; identifies common themes and promotes solutions for cases of inadequate VTE prevention. For these reasons, RCA reports are particularly relevant to the NHS' current focus on making efficiencies through prevention of avoidable harm, and it is important that CCGs ensure they are being conducted in a timely manner. Our survey asked CCGs how they quality assure that providers are complying with the national obligation to perform RCA of all confirmed cases of HAT. The following graph outlines the responses.

How do you quality assure that your providers are complying with the national obligation to perform Root Cause Analyses of all confirmed cases of HAT?

METHOD	2017	2018	Year-on-Year Change
Request real-time submission of RCA on completion	27%	20%	V
Request a monthly report of RCA	29%	29%	\Leftrightarrow
Request a quarterly report of RCA	43%	32%	V
Request an annual report of RCA	5%	7%	1
Request a face-to-face meeting to discuss RCA	24%	3%	
Request made by another means not listed	22%	23%	
This information has yet to be requested	14%	14%	\Leftrightarrow

Last year there was a notable increase in the proportion of CCGs that request real-time submission of RCA reports, monthly reports, and face-to-face meetings; this year, there has been either a decline or no change, with only requests made by another means not listed and request of an annual report of RCA seeing increases.

ADMISSION TO HOSPITAL FOR VTE

While hospital acquired VTE is an important area of focus, the majority of VTE incidents, including HAT, occur outside of the hospital setting. Our survey asked Trusts to provide the number of patient admissions for VTE that occurred outside of a secondary care setting between 1 April 2017 and 31 March 2018. On average there were 424 admissions for VTE that occurred outside of a secondary care setting (roughly 1.5 per day) per Trust in 2017/18. This is an increase from figures in 2016/17 and ranges from 0 to 1,521.

In addition 44% (nearly half) of VTE admissions

had a previous inpatient stay up to 90 days prior to their admission. Of the 24 Trusts with an above average percentage of admissions (over 28%), five were from the Midlands and East of England, eight from the South of England and 11 from the North of England. There were no Trusts from London that were above this average percentage of admissions.

Demographic information on the patients admitted to hospital for VTE is outlined in the following graph.



*The combined percentages of male vs female admissions do not add up to 100% because different numbers of Trusts responded to these questions. The responses however indicate that there is a roughly even gender split in VTE admissions.

Since the APPTG's 2015 annual report, the number of VTE admissions from care home residents has been increasing and has doubled from 4% in 2015 to 9% in 2018. The data return from this question is not consistent however and overall only 16 Trusts were able to return a response. As such, the 9% finding is not evidence of a rapid increase in VTE admissions from care home residents, but rather an indication that the proportion may be higher than previously estimated. Considering that care home residents comprise an extremely small share of the overall population of England and Wales, a share of VTE admissions between 4-9% is disproportionately high and these increases should be monitored and assessed.

On average, only 27% of VTE admissions where the patient had a previous stay 90 days prior had their VTE risk status displayed on their discharge summary. This is notably low, and is a finding that has remained so throughout a number of the annual reports. Time and again it has been shown that effective communication between staff, patients and hospital patient groups is often a successful way of ensuring the better delivery of care, particularly in regards to VTE prevention.

There were, however, notable examples of Trusts using the survey in order to improve their own services. For example, East Lancashire Hospitals Trust indicated that 'on seeing the query in this FOI questionnaire, the Trust recognises that there is scope to strengthen this further by incorporating a mandatory data field within Discharge summaries to state what the VTE risk assessment status of each patient is at time of discharge similar to the risk assessment undertaken on all admissions regardless of whether they are diagnosed with VTE/ HAT or not.'They went on to outline that this would be taken forward as an organisational action plan through the VTE committee and further updates to discharge summaries would be considered to address this cross-organisationally.

MANDATING VTE BEST PRACTICE

Local incentive schemes

It has now been two years since the NHS Standard Contract (2016/17) removed the national sanctions for breaching the risk assessment threshold. This year's Annual Survey found that the vast majority (91%) of CCGs had clearly mandated in their providers' service contracts that failure to comply with best practice in VTE prevention would result in consequences imposed by the CCG. Again this level is relatively consistent with previous years; however the Annual Survey also found that there has been another reduction in the number of CCGs agreeing to set a local penalty for failure to comply with the VTE Risk Assessment National Quality Requirement, with only 23% of CCGs answering yes.

As with last year, the majority said that breaches of the National Quality Requirement result in the issuing of a contract performance notice with a remedial action plan. Other monetary penalties include a £200 fine per patient not receiving a VTE risk assessment. Top financial penalties included a £1,000 penalty per patient identified at risk of developing VTE who does not receive appropriate prophylaxis and a £5,000 penalty per patient if HAT is found to be as a result of failure to provide appropriate prophylaxis.

Mandating VTE Best Practice Locally

CCGs that have clearly mandated in their providers' service

contracts that failure to comply with best practice in VTE prevention will result in consequences



CCGs that have agreed a local penalty for failure to comply with the VTE Risk Assessment National Quality Requirement



Local cost of VTE

In 2005, the Health Select Committee estimated that the treatment and management of VTE costs the NHS approximately £640 million per year. Since 2005 however, there has yet to be another comprehensive review of this figure. The APPTG has taken steps to break down the cost of VTE since 2017, asking CCGs if they have an estimate of the cost of VTE to the NHS locally (including the cost of treatment, hospital bed days, sanctions and any litigation costs).

Year	Average Cost	Estimated cost across all CCGs	Percentage of CCG responses				
Clinical Commissioning Groups							
2016/2017	£938,357	£195,178,256	22%				
2017/2018	£815,289	£158,981,376	31%				
2017/2018*	£602,251	£117,438,945**	64%				
NHS Trusts							
2017/2018*	£1,011,437	£146,658,365**	46%				

*Data supplied here is taken from the cost of VTE FOI survey, which specifically focused on the financial implications of VTE management and treatment.

**This data reflects the cost of PE and DVT combined at CCG and Trust level, rather than the combined cost of VTE treatment, hospital bed days, sanctions and any litigation costs.

While the figures above (£195.1m and £158.9m) act as a helpful guide, the percentage of respondents means that in order to fully assess the cost and impact of VTE management and treatment on the NHS, a more precise analysis must be undertaken. As such, following the annual survey, the APPTG ran a smaller FOI survey, focused specifically on the cost of VTE treatment and management at CCG and Trust level.

Data collection varied across CCGs and Trusts, with some providing a full cost estimate and others providing the number of patient admissions with VTE as raw data. To arrive at a cost estimate for the number of admissions, we first found the average cost of a single admission, which came to £1,637 for CCGs and £1,615 for Trusts. This was then multiplied against the number of admissions at each individual CCG and Trust that provided data in this format. Across CCGs, it was found that the average cost of VTE hospitalisations was £577,449.03 when multiplied across all 195 CCGs, this came to total spend of £112,602,560.85. This figure aligns closely with the cost of PE and DVT to CCGs, which is estimated to cost an average of £602,251 a year or £117.4m across all 195 CCGs. Although the response rate from Trusts was particularly low (46%), it was found that the average spend across responding Trusts was £955,686.15, which came to £138,574,491 when multiplied across all 145 Acute Trusts. Similar to the figures from CCGs, this cost aligns with the cost of PE and DVT to Trusts, which came to a total of £146,658,365 when the average spend of \pounds 1,011,437 was multiplied across all Acute Trusts.

VTE-related re-admissions are also a considerable financial pressure on CCGs, with the survey finding that the average cost was £124,446.95. This equates to £24,267,155.25 when spread across all CCGs and further increases the overall cost of VTE treatment and management. Similar costs were also found from responding Trusts; however response rates were considerably lower. The majority of CCGs and Trusts were unable to quantify the cost of length-of-stay in hospital due to a VTE diagnosis financially; however, it was found that the average length of stay in hospital was 5.09 days for CCGs and 4.88 days for Trusts, which is positive and broadly aligns with the overall NHS average of 4.93 days (2016) for length of stay in hospital among overnight patients.

While the response rate for the cost of treating VTE related co-morbidities was low, with only 10% of CCGs responding, it does indicate that it is a substantial 'hidden' financial burden, equating to a modal cost of £686,616 across all CCG areas. Again, when this cost is multiplied across all 195 CCGs, it reveals an overall figure of £133,890,120. This is incredibly high, however it should be noted that due to the low number of responses, firm conclusions should not be drawn from this example. Instead, further research should be conducted into co-morbid conditions that can affect VTE patients, including cardiovascular diseases such as acute heart failure. acute myocardial infarction, and acute stroke, as well as cancer, which is thought to have a six-fold increase in the risk of developing VTE.

Unfortunately, responses to the question on the cost of VTE treatment and management were low, with only 12 responses, meaning that like the question on comorbidities, firm conclusions cannot be arrived at. However, the available data did highlight the wide variation between CCGs, with VTE management costs ranging from \pounds 5,204 to \pounds 455,973. This question also had a low response rate from NHS Trusts so further analysis will need to be conducted into the actual cost of VTE management and treatment, as defined by assessing, diagnosing, treating and reducing the risk of VTE.

Overall, the cost of VTE survey data gives a clearer picture into the financial implications of VTE for CCGs and NHS Trusts, and what it does indicate is that the overall cost of managing and treating VTE seems to be falling. There are, however, a number of other costs associated with the condition, including re-admissions; VTE-associated complications, treating comorbidities, and the wider management and treatment of VTE. Further research will also need to be conducted into the cost of VTE related co-morbidities, as our initial findings have indicated that this is a particularly large 'hidden' cost. However, as noted, the lower number of respondents does mean that firm conclusions cannot be drawn.

It is important to note that these figures do not represent the overall cost of VTE to the NHS and the wider economy. For example, NHS Resolution has highlighted the risk of VTE clinical negligence claims, with more than 123 cases between 2008 and 2014 costing the NHS over \pounds 10m in legal costs and compensation. Indirect costs of the condition are also not included, so wider analysis is needed in order to build a more complete picture of the financial impact of VTE.

PATIENT INFORMATION

Patient communication is an essential part of effective and long-lasting healthcare. However, patients being discharged from hospital can often face a "disjointed" and "fragmented" process from hospital back to their GP, putting them at risk of harm. Empowered patients are the first line of defence against potentially avoidable blood clots, and their vigilance could possibly lead to the prevention of a later hospital admission for VTE.

The vast majority of Trusts (80%) indicate that they distribute their own patient information leaflet on VTE; while 38% have a documented discussion with a HCP. There has been an

increase in the number of Trusts which distribute patient information leaflets produced by external organisations, with 21% now doing so. Popular examples include EIDO Healthcare, Pfizer and the Lifeblood & Exemplar Centre Network. It's positive to see that Trusts continue to publish or distribute patient information leaflets as the APPTG consistently encourages Trusts to follow NICE Quality Standard 3:VTE Prevention - Quality Statement 6, which outlines that patients/carers are offered verbal and written information on VTE prevention as part of the discharge process.



Additionally, our survey asked Trusts that provide written information on VTE prevention whether they provide this information in languages other than English. 36% of Trusts provide written information in languages other than English. The majority of these said that they offer translation on request. However, other languages included Polish, Chinese and Arabic.

CONCLUSION

This year's survey of Trusts and CCGs shows that, like last year, many areas of best practice – VTE risk assessment, RCA of confirmed HAT, and provision of written and verbal patient information – are well established across the country. However, there is evidence of decline in a number of areas, even within those areas that have met their targets.

A positive is that patient communication is being maintained, with 80% of Trusts disseminating their own patient information leaflets on VTE, as well as in a range of available languages. This is important as patients who understand their condition and feel comfortable monitoring their own progress are far less likely to be admitted to hospital, where further complications can arise. More Trusts, however, need to start recording the risk of VTE on patients discharge forms.

Following on from a key publication from the HSJ, which revealed a decline of VTE risk assessments by around I per cent for the whole of England; the annual survey, covering the dates from April 2017 to March 2018, has corroborated this, finding that the percentage fall is consistent. This means that tens of thousands of patients are being missed and that many patients may not be receiving appropriate thromboprophylaxis, which as has been consistently shown, can greatly reduce mortality in patients.

The cost of VTE survey results has also given a greater insight into the overall financial implications of treating and managing VTE. Response rates from CCGs across the NHS have been good and initial results have indicated that the cost of DVT and PE is falling. Further analysis, however, is still required, particularly at Trust level and hidden costs such as VTE related comorbidities should also be monitored, as initial findings have shown that this figure is high.

While the NHS is facing a number of pressures across the organization, including financial constraint and capacity issues, it is crucially important that VTE prevention and management remains a focus, particularly given the increasing rate of admissions and the rising elderly population.VTE risk assessment is an excellent way of helping to improve patient safety, while also lowering overall cost. It is therefore essential that every effort is made to ensure that the VTE risk assessment rate does not drop below 95%, and that instead this figure is increased next year.

Following the publication of the NICE guideline in March this year - venous thromboembolism in over 1 6s: reducing the risk of hospitalacquired deep vein thrombosis or pulmonary embolism - effort should be made to ensure that standards are maintained and thoroughly improved, particularly in relation to risk assessment and the appropriate administration of thromboprophylaxis. This offers a key opportunity to strengthen areas in need of improvement through clear and up-to-date guidance.

APPTG RECOMMENDATIONS FOR 2019

Drawing on the evidence gathered through this year's survey, the APPTG has identified the following recommendations for 2019 and calls on the VTE community to work together to support their delivery:

- 1. NHS improvement should develop a programme of work in order to raise awareness around the importance of undertaking and maintaining VTE risk assessment levels. This could involve developing an online hub which gives access to VTE risk assessment tools, best practice case studies and other useful resources.
- 2. NHS Improvement should expand the VTE National Quality Requirement on risk assessment to include a requirement that data is collected for the percentage of at-risk patients who receive thromboprophylaxis (mechanical and pharmacological) after appropriate risk assessment.
- 3. A full audit of VTE management and treatment in care homes, conducted by local authorities and clinical commissioning groups, should be commissioned due to the steady rise in admissions/readmissions of care home residents with VTE. Education support should also supplied to those who provide the medical and nursing care in care homes.

- 4. Hospital discharge summaries should include a distinct section for VTE risk, indicating a patient's risk level and steps that should be taken within the community to manage this risk.
- 5. The Department of Health should undertake a comprehensive review of the long-term costs to the NHS associated with VTE in order to ensure that commissioning services deliver highquality VTE prevention services.
- 6. Public Health England should develop a National Public Health profile for VTE, which would highlight areas of variation in healthcare provision across the country and allow commissioners to focus their efforts in order to improve health and wellbeing, and reduce inequalities.
- NHS Trusts should ensure that data is captured and recorded routinely in order to guarantee that they are meeting Statement 2 of Quality Standard 29, ensuring that diagnostic investigations are completed within 24 hours.

FURTHER INFORMATION

All-Party Parliamentary Thrombosis Group http://www.apptg.org.uk/

Anticoagulation UK http://www.anticoagulationuk.org/

Thrombosis UK http://www.thrombosisuk.org/

NHS England - VTE Risk Assessment Data http://www.england.nhs.uk/statistics/statistical-workareas/vte/

NHS England – Sign up to Safety Campaign http://www.england.nhs.uk/signuptosafety/

NICE Guideline 89 - Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism https://www.nice.org.uk/guidance/ng89 NICE Clinical Guideline 144 - Venous thromboembolic diseases: the management of venous thromboembolic diseases and the role of thrombophilia testing http://guidance.nice.org.uk/CG144

NICE Quality Standard 3 – Venous thromboembolism in adults: reducing the risk in hospital https://www.nice.org.uk/guidance/qs3

NICE Quality Standard 29 - Diagnosis and management of venous thromboembolic diseases http://guidance.nice.org.uk/QS29

NICE Medical technologies guidance 19 – The geko device for reducing the risk of venous thromboembolism https://www.nice.org.uk/Guidance/mtg19

CONTACT DETAILS

All-Party Parliamentary Thrombosis Group Officers

Lyn Brown MP (Chair) Andrew Gwynne MP (Vice Chair) Sir David Amess MP (Vice Chair) Baroness Masham of Ilton (Vice Chair) Lord Haworth (Secretary)

All-Party Parliamentary Thrombosis Group Contact

All-Party Parliamentary Thrombosis Group Secretariat c/o Four Public Affairs, T: 020 3761 4451 E: robbie.toomey@fourcommunications.com



Anticoagulation UK pays Four Communication to act as the group's secretariat from grants received from the Pfizer-BMS Alliance and Bayer

©All-Party Parliamentary Thrombosis Group



appg

ANNUAL REVIEW NOVEMBER 2018

APPTG ANNUAL SURVEY RESULTS

©All-Party Parliamentary Thrombosis Group