

Reducing the incidence of Hospital Acquired Thrombosis – An All Wales Perspective

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Context and Problem

2005 - The House of Commons Health Committee reported in 2005 that an estimated 25,000 people in the UK die from preventable Hospital Acquired Thrombosis (HAT) every year, approximately 10% of all hospital deaths.

2010 - English Hospital Trusts attached a CQUIN payment to the Venous Thromboembolism (VTE) Risk Assessment to achieve a 95% uptake of assessment of patients admitted to hospital. Welsh Health Boards' do not have any financial incentive to improve VTE Risk Assessment uptake.

Innovative methods of improvement needed to be developed.

Strategy for Change

2012 - Welsh Health & Social Care Committee hold a 1 day Hospital Acquired Thrombosis meeting. 5 recommendations made including:

- **Recommendation 2:** The Committee recommends that a standard procedure be implemented to reduce HAT in Wales, mandating clinicians to risk assess and to consider prescribing appropriate thromboprophylaxis, mechanical or chemical for all hospitalised patients.
- **Recommendation 3:** The Committee recommends that health boards should develop a standardised method to demonstrate a hospital acquire thrombosis rate for each hospital in Wales and at a national, all Wales level.
- **Recommendation 4:** The Committee recommends that a Root-Cause Analysis should be undertaken for each case of venous thromboembolism (VTE) at Welsh hospitals, or for patients presenting VTE within 3 months of being discharged from a Welsh hospital, to establish whether they were acquired as a result of hospital treatment.

2014 - All Wales Hospital Acquired Thrombosis Steering Group formed.

Multidisciplinary membership from NHS Wales and Thrombosis UK. Reports directly to the Welsh Assembly Government. The group aims:

- Devise and implement process to reduce the incidence of HAT across the Principality.
- Develop a standardised system by which HAT is reported centrally to the Welsh Government
- Implement a process by which all learning may occur whenever an avoidable HAT occurs.

2015 – Process of identifying and reporting potentially preventable HAT's to WAG commences in All 7 Welsh Health Boards.

Measurement of Improvement

VTE cases associated with a hospital admission are validated to determine if they are a potentially preventable. The number of patients diagnosed with a positive VTE determines this either:

- During their inpatient admission (length of stay greater than 24 hours), or
 - Following a hospital admission within the previous 90 days post discharge.
- To determine whether a detailed root cause analysis (RCA) is required the following is confirmed:
- The patient received appropriate thromboprophylaxis according to current NICE guidelines.
 - If the patient's notes show that, the patient has not received appropriate thromboprophylaxis the documented VTE risk assessment needs to be reviewed.
 - If the documented risk assessment is available and supports the action not to provide appropriate thromboprophylaxis, then a detailed RCA is not required.
 - If a documented risk assessment is not available or the risk assessment does not support the action not to provide appropriate thromboprophylaxis, then a detailed RCA is required.

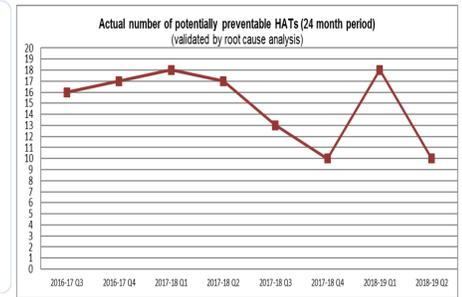
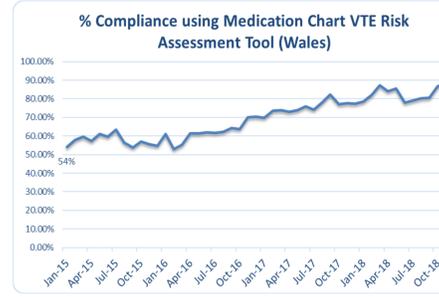
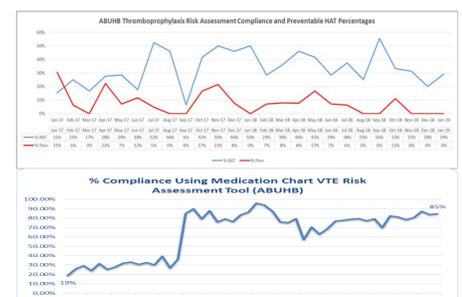
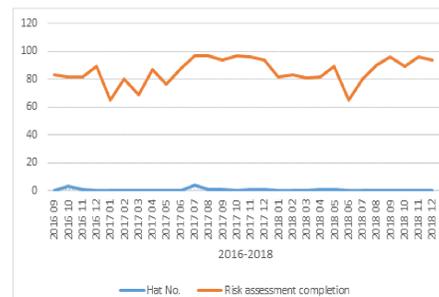
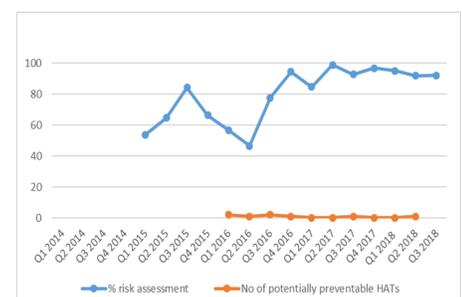
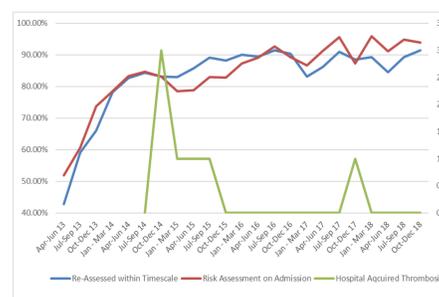
The detailed RCA is undertaken by the responsible Consultant, or appointed appropriate Clinician, to confirm whether the HAT was avoidable or not and to identify the lessons learnt. The lessons learnt are to be fed back to the clinicians concerned.

Effects of Changes

The effect of the changes has been impressive in terms of the increase in VTE risk assessment uptake and a downturn in the number of potentially preventable HAT's since the beginning of the Welsh Assembly Government HAT / RCA project. The charts below demonstrate how data is submitted monthly and quarterly to WAG from each health board and the graphs demonstrate thromboprophylaxis risk assessment uptake from 4 individual health boards in comparison with the complete picture across all Wales.

Hospital Acquired Thrombosis														
Reporting Schedule: Monthly		Reporting Template: The total number of suspected hospital acquired thromboses each calendar month.												
Health Board: ABMU		Submission Date: 15 working days after month end or 14th of the following month.												
Date of Report: 16.05.18		Return form to Lisa Phillips@wales.gig.gov.uk												
Completed By: Andrea Croft		Contact Number: 01656 752731												
E-mail Address: andrea.croft@wales.nhs.uk		E-mail Address: andrea.croft@wales.nhs.uk												
Number of VTE cases associated with a hospital admission which are possibly HAT per quarter. These cases are to be validated to determine if they are a HAT.		Apr 2017	May 2017	June 2017	July 2017	Aug 2017	Sept 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Total
		12	11	10	8	10	9	18	12	13	14	13	7	137
		Quarter 1 Total: 33			Quarter 2 Total: 27			Quarter 3 Total: 43			Quarter 4 Total: 34			

Hospital Acquired Thrombosis														
Reporting Schedule: Quarterly		Reporting Template: The total number of suspected hospital acquired thromboses each calendar quarter.												
Health Board: ABMU		Submission Date: 15 working days after quarter end or 14th of the following month.												
Date of Report: 16.05.18		Return form to Lisa Phillips@wales.gig.gov.uk												
Completed By: Andrea Croft		Contact Number: 01656 752731												
E-mail Address: andrea.croft@wales.nhs.uk		E-mail Address: andrea.croft@wales.nhs.uk												
Number of VTE cases associated with a hospital admission which are possibly HAT per quarter. These cases are to be validated to determine if they are a HAT.		Q1 2017	Q2 2017	Q3 2017	Q4 2017	Total								
		33	27	43	34	137								
Number of cases remaining suitable to undergo root cause analysis (RCA) completed (of 6)		26	22	27	27	114								
Number of cases not to be HAT or potentially preventable HAT (of 6)		7	5	16	7	35								
Number of cases not to be HAT or potentially preventable HAT (of 6)		27	22	33	27	114								



Lessons Learned

Collaborative working between government and clinicians can result in sustainable, nationwide improvement.

Some organisations that have identified HATs that were potentially preventable and pinpointed areas of learning so that future delivery can be improved.

To ensure that all organisations can benefit from this learning and to prevent similar incidents going forward, details of these lessons learnt and corrective actions for 2018-19 are provided in the following text:

- Under utilisation and documentation of risk assessment. Risk assessment not completed, resulting in prophylaxis not being prescribed
- Prescribed doses of Tinzaparin not 'signed' for on Medication chart.
- Extended prophylaxis not prescribed on discharge as required.
- Inappropriate thromboprophylaxis prescribed.
- The submission of incident reports has generated discussion among consultants resulting in improvements in prescribing and documentation.