

## Analysis Method Notice

### Preventable Hospital Acquired Thrombosis (HAT)

This notice describes an Analysis Method that has been developed for use in the production of published national outcome indicators, performance measures and/or currencies, which are derived directly from NHS Wales data.

The Analysis Method has been reviewed by the Analysis Methodologies Group and its output submitted to the Welsh Information Standards Board (WISB) for potential accreditation.

*It should be noted that, where the data flow on which the analysis is being undertaken has not been reviewed by WISB (see 'Status of WISB Data Standards Assurance' below), accreditation of the analysis method **cannot** be interpreted as an approval of the underlying data standards or the quality of the data used.*

*It is recognised that formal review and/or assurance of the data flow may have been undertaken by other bodies, where those data are being formally published; for example, as Official Statistics'. In such circumstances, users of this method are advised to contact the relevant organisations should they require further information on the underlying quality of the specified data source.*

For further details about the group, including Terms of Reference and membership, please visit the following website:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=56696>

**WISB Reference:** ISRN 2018 / 003

Please address enquiries about this Analysis Method the NHS Wales Informatics Service Data Standards Team.

E-mail: [data.standards@wales.nhs.uk](mailto:data.standards@wales.nhs.uk) / Tel: 029 2050 2539

<b>WISB Analysis Method Appraisal Assessment</b>	<b>Accredited</b> This Analysis Method has been appraised by WISB and is felt to: <ul style="list-style-type: none"> <li>• Meet the specified indicator requirement, in that it is suitable for its calculation / derivation;</li> <li>• Is reproducible by organisations, where appropriate.</li> </ul>
<b>WISB Analysis Method Appraisal Outcome(s)</b>	

<b>Status of Data Standards Assurance</b>	<b>WISB Reviewed</b> The data used in this Analysis Method are based on data item standards that have been through the Information Standards Assurance Process.
<b>WISB Decision</b>	<b>Approved</b>
<b>Data Standards Assurance Outcome(s)</b>	

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**Indicator**

The number of potentially preventable hospital acquired thromboses

**Target:**

Quarterly reduction

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**Rationale / Context**

As outlined by the 1000 Lives Improvement Programme, a person is 10 times more at risk of developing a blood clot when being treated for a serious illness in hospital and that approximately 70% of these cases could potentially have been avoided if preventative measures were put in place. A key recommendation of the Welsh Government's inquiry into hospital acquired thrombosis (2012) is that the number of people suffering avoidable hospital acquired clots is to be minimised and both professionals and patients should be made aware of this problem so that steps can be taken to prevent VTE.

One of the key actions of the 1000 Lives Improvement programme is working with the thrombosis charity Thrombosis UK (formally Lifeblood – The Thrombosis Charity) and NHS organisations in Wales to reduce the incidence of hospital acquired thrombosis.

Relates to: HSCC Inquiry into Hospital Acquired Thrombosis 2012 and is a key action of the 1000 Lives Improvement Programme.

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**Data Source(s)**

Welsh Government's Hospital Acquired Thrombosis data monitoring return.

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**Definitions:****Definitional Guidance:****Data Items:**

n/a

**Terms:**

n/a

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**Detailed Specification**

The data source for completing Welsh Government's Hospital Acquired Thrombosis data monitoring return are as follows:

- Source of identifying a positive VTE: Patients reported on RADIS.
- Incidents reported via a post mortem (or other mortality tools).
- Source of admission history: Patient Administration Systems (PAS).

A HAT that could have been potentially avoided is determined by identifying a patient (adult only – age 18 plus) who had a positive VTE either:

- Following a hospital admission (length of stay is to be greater than 24 hours) within the previous 90 days post discharge. It does not include patients with a stay of less than 24 hours, outpatients
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(including endoscopy) or patients who attended A&E or emergency procedures in outpatients (i.e. fracture clinics). A patient with multiple admissions within 90 days should only be reported once.

or

- During his/her current in-patient admission (length of stay is to be greater than 24 hours). This excludes day cases.

Until the collection system is improved, the positive VTE and hospital admission must be within the same health board (e.g. it does not include a VTE diagnosed by one health board and a hospital admission within the previous 90 by another health board). In these instances, the diagnosing health board/trust should make every effort to inform the health board where the HAT was instigated. This principle also applies to patients treated in private hospital.

RADIS procedure codes to be used are:

- CPAUG: CT Angiogram pulmonary - Computed tomography angiography of pulmonary artery (procedure)
- NCHEQ: NM Lung perfusion scan - Pulmonary perfusion study (procedure)
- NCHEV: NM Lung ventilation scan V - Pulmonary ventilation study (procedure)
- ULLVB: US Doppler lower limbs Both - Doppler ultrasonography of vein lower limb (procedure)
- ULLVL: US Doppler lower limb veins Lt - Doppler ultrasonography of vein lower limb (procedure)
- ULLVR: US Doppler lower limb veins Rt - Doppler ultrasonography of vein lower limb (procedure)
- ULLCL: US Compression venography lower limb Lt - Ultrasound compression venography of lower limb (procedure)
- ULLCR: US Compression venography lower limb Rt - Ultrasound compression venography of lower limb (procedure)
- ULLCB: US Compression venography lower limb B - Ultrasound compression venography of lower limb (procedure)

The count does not include cases where the following criterion has been met:

- The full Root Cause Analysis confirms that the VTE is not a HAT or a preventable HAT. (A full RCA is to be completed if appropriate thromboprophylaxis has not been provided and a risk assessment is not available or does not support the action taken).

Cases with missing notes or where the relevant information is missing at the time of data submission are not considered for RCA and are not included in the count. When missing notes have been found and audited a retrospective correction is to be re-inputted under the relevant quarter that the positive VTE incident occurred. Any notes not found within a 6 month period should be excluded from the count. (Note: Missing notes is a cause for concern in itself, since it is not possible to identify if a case was potentially preventable or not).

Data is derived from the Welsh Government's collection of management information from health boards and trusts. The standardised approach to reporting the information to Welsh Government was agreed by the National HAT Steering Group. Health boards and trusts complete a standardised proforma and forward it to Welsh Government on a quarterly basis. Please refer to 'Additional Information' for a copy of the reporting proforma.

Data is presented on an all Wales basis and is also available at a health board/trust level. Data will NOT be used to make organisational comparisons.

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## **Calculation:**

### ***Numerator***

The number of potentially preventable hospital acquired thromboses.

### ***Denominator***

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## Reporting Format / Frequency

Reporting Frequency	Quarterly
Time Delay of Reported Data?	<p>3 months</p> <p>Health boards / trusts are to submit their quarterly data as follows: Quarter 1: 14 October Quarter 2: 14 January Quarter 3: 14 April Quarter 4: 14 July</p> <p>Note: In addition to this indicator, NHS organisations are expected to complete:</p> <p>Monthly data on the number of VTE cases associated with a hospital HAT per quarter. These cases are to be validated to determine if they are a HAT. Monthly data is to be reported 10 working days after month end of 14th of the following month.</p> <p>A quarterly or annual summary of lessons learnt to improve delivery and corrective actions agreed. This is to be completed for all HATs that are potentially preventable. This is to be submitted in accordance with the quarterly reporting timetable provided above, or if submitted annually by 14 July.</p>

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## Discussion Points / Areas for Future Development

*This section details any areas the Analysis Methodologies Group felt needed further consideration / review by the 'owner' of the method.*

## Appendix A – Additional Information: Quarterly Reporting Template - Preventable Hospital Acquired Thromboses (HAT)

Reporting Schedule	Quarterly
Health Board	
Date of Report	
Completed By	
Contact Number	
E-mail Address	

**Reporting Template:**  
 > The number of Root Cause Analysis (RCA) completed (based on the quarter's number of suspected HAT).  
 > The actual number of preventable HATs (determined from the Root Cause Analysis).  
 > The number of cases not felt to be HAT.  
 > Summary of learning and actions.

**Submission Dates:**  
 Quarter 1: 14 October (Data for April to June)  
 Quarter 2: 14 January (Data for July to September)  
 Quarter 3: 14 April (Data for October to December)  
 Quarter 4: 14 July (Data for January to March)

**Return form to:** [hss.performance@wales.gsi.gov.uk](mailto:hss.performance@wales.gsi.gov.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 (Field 1)
Number of notes missing (unable to validate records) * (Field 2)
Number of Root Cause Analysis (RCA) completed (Field 3)
Actual number of potentially preventable HATs (Field 4)
Number felt not to be HAT or potentially preventable HAT (Field 5 a&b)

Q1	Q2	Q3	Q4	Total
0	0	0	0	0
				0
				0
				0
0	0	0	0	0

\* Retrospective corrections should be re-inputted under the relevant quarter once missing notes have been received and audited. For example, missing notes from any quarter should be submitted on your next return but updated in the relevant column for the quarter that the incident occurred. Any notes not found within a 6 month period should be excluded from the report.

Summary of lesson learnt to improve delivery	Corrective actions agreed

**Appendix B – Additional Information: Monthly Reporting Template - Preventable Hospital Acquired Thromboses (HAT)**

<b>Reporting Schedule</b>	<b>Monthly</b>
<b>Health Board</b>	
<b>Date of Report</b>	

<b>Completed By</b>	
<b>Contact Number</b>	
<b>E-mail Address</b>	

**Reporting Template:** The total number of suspected hospital acquired thromboses each calendar month.

**Submission Date:** 10 working days after month end or 14th of the following month.

**Return form to:** [hss.performance@wales.gsi.gov.uk](mailto:hss.performance@wales.gsi.gov.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.**

April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
<b>Quarter 1 Total</b>			<b>Quarter 2 Total</b>			<b>Quarter 3 Total</b>			<b>Quarter 4 Total</b>			

**Appendix C – SQL Code** (where applicable)

n/a