Health and Social Care Committee
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One-day inquiry into venous thrombo-embolism prevention – Evidence from Abertawe Bro Morgannwg University NHS Trust

Contribution to the National Assembly for Wales Health & Social Care Committee Inquiry into Venous Thrombo-Embolism Prevention in Hospitalised Patients in Wales (24th May 2012)

1. Background

The then Abertawe Bro Morgannwg University NHS Trust held the first meeting of its Thromboprophylaxis & Anticoagulation Committee on 12 January 2009. Terms of Reference were drawn up in line with the recommendations of Lifeblood the Thrombosis Charity (2008) booklet on setting up and running Thrombosis and Thromboprophylaxis Committees. The committee was initially chaired by the Associate Medical Director on behalf of the Medical Director. Since October 2010, the Medical Director has chaired the committee.

Following the publication of NICE Clinical Guideline 92 *Venous thromboembolism: Reducing the risk* in January 2010, the Thromboprophylaxis & Anticoagulation Committee's Terms of reference were amended to reflect the committee's role in implementing the guidance and monitoring compliance. The Committee also acted as the Project Board for the 1000 Lives HAT Mini Collaborative and continues to lead and monitor the improvement work around the prevention of hospital acquired thrombosis (HAT).

2. Outcome measure

The Health Board has adopted a process for measuring its monthly Hospital Acquired Thrombosis rate based on the methodology developed by Betsi Cadwallader ULHB. The ABMU methodology relies on Radiologists using a specific code to denote positive VTE scans. The Radiology IT system is then linked to the patient information systems to flag up any VTE patients who have had a hospital admission in the previous 12 weeks. The Health Board's HAT rate for February 2012 was 0.33 which represents 23 patients. This rate is an underestimate as it does not include patients who develop a VTE during the same admission. Work is underway to include patients who develop a VTE $\geq$48hrs post admission to hospital which will give a more comprehensive view.

In future when a patient is identified as having acquired a DVT/PE as a consequence of their hospital stay this will be recorded as an incident and investigated as part of the Health Board's risk management processes.

3. Implementation of NICE Guidance/Implementation of 1000 Lives Plus Risk Assessment Tools

AMBU set up a multidisciplinary HAT Team to link in with the 1000 Lives HAT Mini collaborative. The team comprised of an Anticoagulation Nurse, Surgical Nurse Practitioner, Clinical Pharmacists covering Acute Admissions and surgical specialties supported by a senior manager who is a member of the Medical Director's team.

The 1000 Lives Collaborative developed five separate risk assessment tools including separate tools for Acute Medical, Acute Surgical and Acute Trauma & Orthopaedics admissions. Following testing (Plan Do Study Act cycles) a single Acute Admissions tool was developed for use across ABMU. This was adopted alongside the Elective Surgical and Elective Orthopaedics tools. Both elective tools were tested locally and amended to better fit with the Health Board's Pre assessment arrangements.

Improvement methodology was employed to test, implement and spread the risk assessment tools through the organisation. There have been some notable successes, in particular in pre-assessment of elective patients in orthopaedic and general surgery where we have demonstrated that 100% of patients have been risk assessed for HAT as part of the pre assessment process since January 2011. . Data collection to assess the level of compliance in other elective surgery areas is being rolled out.

Implementation in the majority of "Medical" areas has been a challenge. Where it has been possible to incorporate the risk assessment tool into existing documentation, compliance has been better. A shortened Risk Assessment on the drug chart is being piloted at present in Medical Admissions areas. This will be supported by the Risk Assessment Tool being available for doctors to reference as they make their assessment. Methods of providing the reference material are being explored.

TRAINING In ABMU clinical staff are given teaching and training in thromboprophylaxis from pre registration to consultant level by the anticoagulation CNS & Pharmacist. Pre registration med student are required to complete and pass the e-VTE module prior to commencement as an FP1. Such training should be implemented in to doctor and nurse training programmes

4. Effectiveness and utilisation of pharmacological and mechanical prophylaxis for VTE

The current situation in ABMU HB with regard to mechanical thromboprophylaxis is as follows:

Compression pumps are regularly used in orthopaedic surgery and occasionally used in general surgery depending on the type of surgery and the preference of the surgeon.

Anti-embolism stockings are used throughout the HB with varying degrees of training given to clinical staff. A review of training needs is currently underway.

Mechanical devices are generally given in conjunction with pharmacological prophylaxis in the surgical arena. Mechanical devices, usually anti embolism stockings may be used in medical patients when pharmacological prophylaxis is contra indicated

In medical patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological treatment is required, enoxaparin (a low molecular weight heparin) is initiated at appropriate dose and reviewed following any clinical changes to the patient.

In general surgery patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological prophylaxis is required, a course of enoxaparin is prescribed at appropriate dose.

In orthopaedic surgery patients, where the risk/benefit assessment is considered by the clinician to indicate pharmacological prophylaxis is required, a course of either dabigatran or rivaroxaban (for hip and knee replacement surgery in line with NICE Technology appraisals 157 & 170) or enoxaparin is prescribed.