



Implementing Strategies for Effective VTE Prophylaxis



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Context

- CHUFT is a 600-bed acute district general hospital in South East England, serving a population of 370,000.
- The work celebrates the concept of multidisciplinary team working in tackling venous thromboprophylaxis.

Problem

- Venous thromboembolism (VTE) caused the deaths of over 25,000 people in England in 2005, with current annual estimates at over 60,000¹.
- In 2007, various national directives in the UK^{1,2,3} mandated VTE risk assessments and prophylaxis for hospital inpatients.

Problem Analysis

- A Thrombosis Committee (TC) was constituted in September 2007 to drive the project.
- The TC undertook a gap analysis for CHUFT and developed an action plan.
- Initial audit results revealed that
 - **91%** of adult in-patients required VTE prophylaxis
 - **<50%** of qualifying patients received prophylaxis
 - **No** formal risk assessments were done (although prophylaxis was provided on presumed clinical need)
 - Criteria for prophylaxis were not uniform
 - The VTE guidelines were outdated
 - Barriers to prescribing prophylaxis among clinicians needed to be addressed.

Strategy for Change

1. Action plan approved by the Clinical Executive Board.
2. Mr Howard pioneered a novel **on-line risk assessment tool** in-house. The UK Department of Health plans to roll out on-line risk assessment as part of its national VTE risk assessment strategy.

3. VTE guidelines were revised and publicised.
4. Barriers to prescribing prophylaxis were addressed.
5. Enoxaparin was agreed for chemical prophylaxis.
6. Pharmacy initially printed Enoxaparin stickers for the drug charts.
7. Pharmacy and nursing staff, ensured that each unsigned sticker on the drug chart led to a prompting of the doctors to risk assess the patients.
8. Pharmacy developed training for all nurses on risk assessment.
9. All grades of doctors were informed and trained on using the on-line tool.
10. Patient leaflets and other information cascades were employed.
11. The risk assessment tool and a dedicated VTE webpage were created on the Trust intranet.
12. This strategy was **completed within six months** of the first TC meeting in September 2007.

Measurement of Improvement

On-going audits monitor compliance.

- Initial data showed greater compliance by Medicine over Surgery.
- Overall compliance rates for risk assessments are currently **over 90%** of all adult in-patients.

Effects of Changes

- Department of Health inspection visit to CHUFT in November 2008 (**14 months** after TC was constituted), led to award of "**VTE Exemplar Site Status**"; becoming only the fifth NHS acute Trust to be so recognised.
- Although data is being collated for post-surgical VTE episodes, alongside other measures of VTE during and post hospitalisation, the prophylaxis being offered appears to be effective for most patients.
- Audits are ongoing to measure the appropriateness of the choice of prophylaxis provided.
- Our online tool is being revised in light of 2010 NICE guidelines⁴, for the **East of England Strategic Health Authority**.

Lessons Learnt

- Safety can be achieved with simple solutions developed in-house.
- The positive experiences of CHUFT are being shared with colleagues nationwide.
- Dr Eradiri was appointed a member of the **Department of Health's Pharmacy VTE Steering Group**, advocating roles for Pharmacy in the process.

Message for Others

- Multidisciplinary working has multiplier effects on the outcome when implementing patient safety changes or improvements in the quality of care.

References

1. The Chief Medical Officer's recommendation on VTE prophylaxis (2007) http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073944
2. NICE guidelines on VTE prevention in surgical patients (2007) <http://guidance.nice.org.uk/CG46>
3. National Patient Safety Agency's (NPSA) alert 18 (2007) on actions that can make anticoagulant therapy safer http://www.npsa.nhs.uk/site/media/documents/2436_An anticoag alert FINAL.pdf
4. NICE guidelines on reducing VTE risk in hospital in-patients (2010) <http://guidance.nice.org.uk/CG92>

* Dr Wood was also Medical Director when the project was undertaken.