Patient and doctor engagement: a missing link in preventing venous thromboembolism

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Disclosures and acknowledgements

• StollzNow Research

• Covidien
Venous thromboembolism (VTE)

Deep vein thrombosis (DVT)

- Clot in inferior vena cava (IVC) and (R) iliac vein

Pulmonary embolism (PE)

- Clot in pulmonary arteries
Deaths from VTE

• 0.2% of Hospital Admissions, 7% of Hospital Deaths
• deaths from VTE exceed deaths from:
  – bowel, prostate and breast cancer, road traffic accidents, HIV / AIDS
Long term sequelae of VTE

Recurrent PE →

Chronic Thromboembolic Pulmonary Hypertension (CTEPH)

→ Congestive Cardiac Failure (CCF)
Long term sequelae of VTE

→ Post thrombotic syndrome / chronic venous insufficiency

- oedema
- lipodermatosclerosis
- chronic venous ulcer
Chronic venous ulceration

- 300 per 100,000
- 25% due to DVT
- estimated annual costs
  - 1-2% of health care budget
Access Economics: cost of VTE

- financial cost of VTE = $1.7 billion (0.15% of GDP)
  - 80% lost productivity due to premature death
  - 9.4% efficiency loss from taxation forgone and government health expenditures
  - 8.6% direct health system expenditure
  - 1.3% bring-forward of funeral costs
  - 0.7% value of informal care for people with VTE

- value of lost wellbeing (disability and premature death)
  = approx. $20 billion ($11.9 - 27.3 billion)
Access Economics: cost of VTE

• compared to other conditions costed by Access Economics, VTE is second only to muscular dystrophy on a financial cost per case basis

• if the heavy dollar value of the burden of disease cost from premature mortality is included, VTE ranks most costly overall
The burden of venous thromboembolism

Venous thromboembolism (VTE) is more common than the most common types of cancer.

5,000 Australian hospital patients die from venous thromboembolism (VTE) every year, 1,200 patients die from Golden Staph infections.
Although VTE is more common than the most common types of cancer,

there is a low general awareness of VTE, the risk factors for VTE and the importance of VTE prevention
The majority of VTE events occur post hospital discharge, especially in high risk orthopaedic surgery and cancer patients.
Incidence of VTE events after THA and TKA

White et al Arch Intern Med 1998
Practice gaps identified in VTE management

59% of at risk **surgical** patients receive guideline recommended prophylaxis

40% of at risk **medical** patients receive guideline recommended prophylaxis

Patients at risk of VTE

Mean = 52%  (N = 68,183)

Use of ACCP recommended prophylaxis among overall population at risk of VTE

Mean = 50%  N = 35,329

Practice gaps identified in VTE management


Closing the gap: empowering the patient

• Patient and their family engagement is critical to improving health care outcomes and reducing healthcare costs\(^1,2\)

• A range of initiatives exist in Australia and internationally to engage the community for enhanced health outcomes\(^3\)


Consumer research: understanding the patient viewpoint

- *StollzNow Research* investigation 2013
- patient responses online
- quotas set for gender and residential location
- research participants carefully screened to ensure that all responses were genuine
Consumer research: understanding the patient viewpoint

• 1018 people completed a series of questions about VTE

• eligibility criteria:
  √ participants having had surgery or an extended stay in hospital in the last 3 years, or,
  planning to have surgery or an extended stay in hospital in the next 2 years

• sample size → confidence level ± 3.6% at 95% confidence interval
Consumer research: understanding the patient viewpoint

Patient concerns about past or future operations

• few patients (2%) were concerned about VTE

• most were concerned about the effects of anaesthetic (30%) or infections acquired in hospital (30%)
Consumer research: understanding the patient viewpoint

*VTE risk mentioned by Health Care Provider (HCP)*

- only 36% recalled that VTE was mentioned by their HCP
- less likely to be mentioned in a public hospital (28%) than in a private hospital (41%)
- more likely to have been mentioned for elective surgery (44%)
- mentioned to only 5% of maternity patients

64% of patients said their healthcare professional did not mention VTE before an extended hospital stay.
Consumer research: understanding the patient viewpoint

In the course of the survey VTE was explained to the research participants.

Influence of knowledge on VTE

- once individuals are aware of VTE, 84% are extremely or very likely to prefer to go to a hospital with ‘best practice’ VTE prevention.
Patients will change behaviour

- are prepared to accept some degree of inconvenience to use a hospital with 'best practice' VTE management
  - even if more difficult for visitors (42%)
  - travel further (36%)
  - more expensive treatment (25%)
  - change surgeon (22%)
Consumer research: understanding the patient viewpoint

Patients will change behaviour

- knowing about VTE, 69% would definitely or probably discuss it with family and friends who are having surgery

- knowing about VTE, 70% would be prepared to raise it with the doctor of immediate family members
Conclusions

• VTE remains the leading preventable cause of hospital death

• Increasing community awareness, engaging clinicians and creating accountable institutions is a key to minimising the burden of VTE
Conclusions

• Discussion on VTE should be active between HCPs, patients and their families

• VTE risk assessment for individual patients is fundamental to implementing appropriate prophylactic measures
Conclusions

• Educate patients to understand their personal VTE risk profile and the preventative measures appropriate for their individual situation

• Both patient and HCP compliance with the application of appropriate VTE prevention is critical to reducing the incidence of VTE