Overview of hospital pharmacy and its place in facilitating Evidence Based Medicine / Evidence Based Practice

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Disclosure of relevant financial relationships

I am employed by Southampton University Hospitals NHS Trust.

I have no other commercial or financial interests.
Where I started my evidence based journey

The Cottage of Content, Carey

Ross-on-Wye
And where I have arrived ---- or got to so far

• National Clinical Director for Hospital Pharmacy

• Associate Medical Director for Clinical Effectiveness and Medicines Management
What I plan to cover

• Ask if we practice evidence based medicine and explore a UK case study
• Explore why it is difficult to achieve consistent evidence based practice
• Discuss the pathway to evidence based medicine
• Reflect on the statements on hospital pharmacy from the FIP Global Conference in Basel – August 2008
• Consider the what hospital pharmacy can do to support EBP
• Look at the Government policy for England and use UK practice as a case study
• Speculate on the future
Do we currently have evidence based practice in use of medicines?

• Knowing is not doing

• UK thromboprophylaxis story
  Patients are at increased risk of developing venous thromboembolism when undergoing surgery, they are also at increased risk when admitted as medical patients (co-morbidities, immobility, dehydration and so on)
## Size of the problem

EU modelling --- all estimates  
(25 states, 454 million)

- 640,000 symptomatic deep-vein thromboses (DVT)  
- 383,000 pulmonary emboli (PE)

Venous thromboembolism related deaths 480,000 annually  
Only 7% diagnosed & treated.

UK application: 60,000 deaths each year  
Hospital acquired VTE related deaths – 25,000 across the UK each year  
(2005)
Have we known what to do about it?

“Despite overwhelming evidence of the efficacy of an assortment of prophylactic modalities, surveys conducted in the United States, Canada, the United Kingdom, Sweden, Switzerland, Spain, and Australia/New Zealand document wide practice variations among physicians, with 28 to 100% of respondents indicating that they routinely used prophylaxis.”

*Sixth ACCP Consensus Conference on Antithrombotic Therapy, Chest 2001; 119:132S–175S*
So what are we doing about it?

- Parliamentary Committee for UK – The Health Committee Report 2005
- UK Government Response 2005
- Chief Medical Officer letter to all doctors July 2005
- CMO further letter and report of the independent working party on preventing VTE in hospitalised patients, 2007
Chief Medical Officer - 2007

• VTE has for many years been a Cinderella issue, and it is not by accident that VTE is known internationally as the silent killer.

• ..lack of public awareness about the dangers of VTE not due to a lack of understanding of what was good practice.

• What was missing was the implementation of good practice.
All-Part Parliamentary Report – November 2008

• 93% Hospital trusts had a written thromboprophylaxis policy
  ‘quality of these policies…variable’

• 70% undertake risk-assessment for all patients

• 72% tell high risk surgical patients about VTE
Evidence into practice

- Clear guidance
- Exemplar sites
- Tools to use locally
- Educational material
- Regional strategies
- Government interest
- Local visits
- Multiprofessional engagement
So why is evidence into practice difficult

- Is the evidence there?
- Is it convincing?
- Does it apply to our situation?
- Access to evidence
Barriers to Evidence Based Practice

- Seen as too big an issue
- Not owned as a problem
- Too many other demands

- Using evidence
- Implementing change
- Influencing behaviour

- Time to address
- The right meeting structure
- IT support
Adopter Distribution

Rogers’ Innovation Adoption Curve (1995)

- Innovators: 2.5%
- Early Adopters: 13.5%
- Early Majority: 34%
- Late Majority: 34%
- Laggards: 16%
The evidence based pathway for prescribing

- Developing the evidence
- Synthesising evidence into guidelines
- Implementation
- Monitoring Practice
What about pharmacy’s role in this?

FIP Global Conference on the Future of Hospital Pharmacy
Basel Statements 2008

The overarching goal of hospital pharmacists is to optimise patient outcomes through judicious, safe, efficacious, appropriate and cost effective use of medicines

(100% strongly agreed or agreed)
Other statements

- Use hospital pharmacists in all steps of medicines use process (100%)
- Hospitals should utilise a medicine formulary system linked to standard treatment guidelines (99%)
- Hospital pharmacists should be members of pharmacy and therapeutics committees (100%)
- Pharmacists to support access to evidence… (98%)
- …influence collaborative therapeutic decision-making (99%)
- Advanced clinical pharmacy services should manage medication therapy to optimise therapeutic outcomes (100%)
Pharmacists supporting the pathway

- Developing the evidence
- Synthesising evidence into guidelines
- Implementation
- Monitoring Practice
Unpacking the ‘implementation box’

Implementation

Dissemination
Interpretation
Application
Education
Negotiation
Feedback
Prescribing
Individual patient care

National and international policy
Interpreting external influences
Implementing local policy

English based model re layers of influence for EBP

NSF

NICE
Hospital Pharmacy in England as an example of supporting EBP

Where were we in 2008?
• Clinical pharmacy extensively but not uniformly practised
• Extensive network of Medicines Information Centres
• National organisations supporting EBP
• Pharmacists as prescribers
• Limited e-prescribing
• Significant use of pharmacy technicians
• Strong educational and development programmes though not ‘standardised’
• Increasing, though small, numbers of Consultant Pharmacists
• Some centres of excellence re practice research
Pharmacy in England

Building on strengths – delivering the future
The White Paper challenges for hospital pharmacy

• Responsibility for safety
Responsibility for safety

White paper 3.80

• ‘..chief pharmacists of provider organisations, PCTs and other commissioners should have a lead role in ensuring that safe medication practices are embedded in patient care’
The White Paper challenges for hospital pharmacy

- Responsibility for safety
- Ensuring safe transfer of care with respect to medicines
- Developing clinical pharmacy teams
- Rationalisation of manufacturing
- Automation and use of information technology
- Modernising Pharmacy Careers
- Developing the evidence base
- Developing pharmacovigilence role
- Use of skill mix
To conclude

• The thromboprophylaxis case illustrates the importance
• Ensure pharmacists have the right skills and knowledge
• Put the right structures in place
• Use skill mix to maximise efficiency

• What does the future hold?