Getting evidence into policy and practice: The role of health systems and healthcare organizations

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Let me begin with a story…
Acute Myocardial Infarction Beastie

Blockage of a coronary artery by a clot
(pain, impaired function)

→Death of heart muscle deprived of oxygen
(impaired function, death)
Early treatment with clot-busting drugs (thrombolysis) saves lives

<table>
<thead>
<tr>
<th>Hours</th>
<th>NNT</th>
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<tbody>
<tr>
<td>0-1</td>
<td>15</td>
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<tr>
<td>&gt;1-2</td>
<td>27</td>
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<td>&gt;2-3</td>
<td>38</td>
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<td>&gt;3-6</td>
<td>34</td>
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<td>&gt;6-12</td>
<td>56</td>
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<td>&gt;12-24</td>
<td>111</td>
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Boersma E, *et al*  
*Lancet* 348:771-776
“Door to needle time” (1997)
48 UK hospitals in West Midlands

5-fold diff.
Discuss with your neighbours what you think probably accounted for these differences?

5-fold diff.
How can we promote EBHC?

• EBHC initiatives or training often focus on the individual and changing their skills, knowledge and attitudes on the assumption that this will change professional behaviour

• But... **often it is context not attitudes that drive behaviours**

• Procedural, structural and cultural changes need to be wrought at different system and organizational levels
West Midlands Thrombolysis Project\textsuperscript{1}
Change in median “Call to Needle” time

\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Change in median “Call to Needle” time over years 1996-1998.}
\label{chart}
\end{figure}

\textsuperscript{1}Quinn T, Griffiths R, Birkhead J, (unpublished)
“The role of health systems and healthcare organizations”

- What is a “health system” or a “healthcare organization”?
- There is much variety and many levels
- Complex and unique

(most GRIPP studies done at hospital level)
A challenge facing healthcare practitioners, researchers and policy makers is the complexity of healthcare organizations and the multitude of ways these organizations can influence quality of care. The sheer diversity makes it harder to identify effective ways of improving care.
Levels

Back
- International
- National
- Local/regional

Front
- Health system
- Hospital
- Other
What levers and methods do health systems and healthcare organization have to influence the use of evidence for informing decisions?
What levers and methods do health systems and healthcare organization have to influence the use of evidence for informing decisions?
Levers and methods

- **Evidence**
  - Generating quality evidence
  - Collecting high quality data
  - Availability/accessibility of evidence
  - Usability of evidence
  - Active knowledge management
  - “Push”- e.g. automatically into patient records
  - Needs assessments

- **Responsive**
  - to individual patient’s needs and values
  - Support procedure
  - Complaints procedures

- **Physical organization**

- **Care pathways**

- **Culture:**
  - patient-centred
  - evidence-based focus
  - method of ward rounds
  - TQM
  - grand rounds
  - journal clubs
  - peer review
  - collaborative or team working
  - workload (time and space to learn/reflect)
  - open, reflective (rather than blame) culture
  - discourse and dialogue

- **Money**
  - Fiscal policies
  - Levels
  - Distribution
  - Budgetary responsibility
  - Incentives/disincentives

- **Staffing**
  - Recruitment procedures
  - Quality
  - Mix
  - Librarians, clinical epidemiologists
  - Education and Training
  - Accreditation
  - Licensing
  - Credentialling
  - Clinical supervision
  - Recognition / valuing

- **Quality assurance**
  - Setting performance standards
  - Guidelines
  - Contracts (e.g. service level agreement)
  - Inspection
  - Monitoring performance
  - Consumer satisfaction surveys
  - Report cards
  - Audit and feedback
  - Prescribing patterns
  - Outcomes research
  - Indicators
  - League tables
How do health care managers and policymakers make decisions and what role does evidence play in the process?
Policy-makers making decisions...
Policy makers’ hierarchy of ‘evidence’

1. ‘Experts’ evidence (including consultants and think tanks)
2. Opinion-based evidence (including lobbyists/pressure groups)
3. Ideological ‘evidence’ (party think tanks, manifestos)
4. Media evidence
5. Internet evidence
7. “Street” evidence (urban myths, conventional wisdom)
8. Research evidence

Davies P. (2007) Types of Knowledge for Evidence-Based Policies
Policy-makers need to use systematic reviews

Single studies are rarely enough - policy makers need to consider the body of evidence.
National Institute for Clinical Excellence (NICE)

"...there is currently no coherent approach to the appraisal of research evidence and the production of guidance for clinical practice.... NICE will end this confusion by providing a single, national, focus"

A First Class Service
> 500 pages of summaries

Compilation
Summary of Guidance issued to the NHS in England and Wales

Issue 8
April 2004
Guidelines on hypertension – over 35 pages

Key priorities for implementation

1  Guidance
   1.1 Measuring blood pressure
   1.2 Lifestyle interventions
   1.3 Estimating cardiovascular risk
   1.4 Pharmacological interventions
   1.5 Continuing treatment

2  Notes on the scope of the guidance

3  Implementation in the NHS
   3.1 In general
   3.2 Audit

4  Research recommendations
Patterns of leakage
The pipeline from research to practice

Methods

**Systematic review of studies that reported**

- awareness
- agreement
- adoption and/or adherence
- and described appropriate sampling strategies

**Outcomes**

- absolute and conditional rates of
  - Awareness
  - Agreement
  - Adoption
  - Adherence
Results

• 11 studies
• 29 recommendations on
  – Drug
  – Medical management
  – Vaccination
  – Screening
  – Health promotion
• All studies used self-reported questionnaires
• Quality moderate to poor
Absolute rates for drug recommendations

- Aspirin for stable angina
- Beta blockers for stable angina
- Statin therapy for hypertension

Aware | Agree | Adopt | Adhere
Conclusions

- Leakage was progressive ~ 15% per step
- Varied across specialities and between interventions
- Cumulative leakage 66%
Knowledge is not enough

“The intention-action gap… has been public health's arch nemesis for decades. It is rooted in the simple fact that what people say and what they do are often two very different things, especially when it comes to issues that have a normative or moral dimension... such as health…”

• Information may be useful for bringing about change, but it is not sufficient.
• We need to create the conditions in which high quality information is
  – Produced
  – Disseminated
  – Accessed
  – And can be and is used to inform decisions.
NICE Clinical Knowledge Summaries

Welcome to the NICE CKS service which provides primary care practitioners with a readily accessible summary of the current evidence base and practical guidance on best practice in respect of over 300 common and/or significant primary care presentations.

The service is being regularly maintained and upgraded as and when significant new evidence emerges and up to 10 new topics will be added each year.
# Project Plan for the development of the culture for Public Health England

## Project: Public Health England Culture Co-Creation Project

### The need for the project

One of the responsibilities of leadership, some would say the most important responsibility is the creation of the culture of the organisation. The leaders shape culture and managers work within the culture. The culture of an organisation is best defined by Edgar Schein perhaps the world’s leading authority on a subject who defines culture as:

> “The culture of a group can now be defined as a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”


Culture is created by the behaviour of the leadership and expressed by what they write and how they behave...

### Project Description

Public Health England needs to develop a common language and a common set of principles. Public Health England should set up a Culture Co-Creation Project. It would do this by having a one year project in which key books, terms and scientific articles would be made available in a structured way.

The medium chosen should be podcasting with the aim of ensuring that all the Directors of Public Health England contribute to this but in the first three months of the project podcasts from Better Value Healthcare could be used.
Contribution to changing the context and organizations

1. Did you support the AllTrials Petition?

2. Did you write to your MP or your country's health minister to ask your Government to support clinical trial transparency in the draft Clinical Trial Regulation?

3. Do you contribute to the Cochrane Collaboration, systematic reviews or guideline development groups?

4. Have you supported the EQUATOR Network in a practical way?

5. COMET?

6. Prospero?
Concluding remarks on

The role of health systems and organizations

Health systems and healthcare organisations have an enormous influence on whether policies and practice is evidence-based

- **Evidence**
  - Generating high quality evidence through funding, promoting and removing barriers to research
  - Supporting the synthesis, accessibility, usability and implementation of research evidence

- **Governance**
  - Formal and considered structures, procedures and culture that foster EBP

- **Performance**
  - Policy decisions informed by evidence
  - Training
  - Audit
  - Performance monitoring

[EBHC teachers and developers don’t just focus on the individual patient decision but are very active in influencing the world, political and health systems and organisations which provide the context in which healthcare professionals work]