Clinical Guidelines, Mindlines and Knowledge-in-Practice-in-Context

Andrée le May
John Gabbay
Introduction

Us

Medic/ Soc. scientist
Dilemma: ‘HPS vs HTA’

Nurse/ Quant & Qual Researcher
Dilemma ‘Obey vs Question’

The big shared dilemma…
Unsatisfactory implementation theory

--- The problems with this traditional model ---

Too - simple, rational, linear,
uni-directional, individualised, unproblematised,
a-social, a-contextual

Otherwise, it’s OK...

Courtesy of Huw Davies
Communities of Practice: *Services for Older People and Outpatients*

What we were expected to achieve

1. Identify a client-centred problem
2. Frame a focused question
3. Search thoroughly for research derived evidence
4. Appraise the evidence for its validity & relevance
5. Seek and incorporate users’ views
6. Use the evidence to help solve the problem
7. Evaluate effectiveness against planned criteria
What actually happened
“Lawndale”
Ethnography of primary care that set out (in 2001) to explore the way primary care practitioners actually use knowledge in day-to-day practice.

8 years in a first-rate rural primary care practice (“Lawndale”)

Three further short ethnographies in settings of:

- urban university primary care (UK)
- inpatient hospital medicine (USA)
- medical student teaching
Ethnographic findings

• Not just clinical but multiple simultaneous roles
Multiple roles of GPs, e.g:

<table>
<thead>
<tr>
<th>clinical domain</th>
<th>managerial domain</th>
<th>public health domain</th>
<th>professional domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>diagnosing</td>
<td>managing resources, personnel and logistics</td>
<td>disease prevention</td>
<td>keeping up to date</td>
</tr>
<tr>
<td>prescribing</td>
<td>monitoring and improving quality</td>
<td>screening</td>
<td>reviewing practice</td>
</tr>
<tr>
<td>investigating</td>
<td>developing the IT system</td>
<td>health promotion</td>
<td>teaching and training</td>
</tr>
<tr>
<td>advising and explaining</td>
<td>complying with contractual and legal requirements</td>
<td>health education</td>
<td>nurturing collegial networks</td>
</tr>
<tr>
<td>referring</td>
<td>handling the Primary Care Trust</td>
<td>disease surveillance</td>
<td>promoting general practice (e.g. ‘union’ work)</td>
</tr>
<tr>
<td>advocating</td>
<td>training practice staff</td>
<td>knowing the local district</td>
<td>sustaining credibility</td>
</tr>
</tbody>
</table>
Ethnographic findings

• Not just clinical but **multiple simultaneous roles**

• Not guidelines but **mindlines**
Mindlines

– Internalised collectively reinforced, partly tacit, guidelines-in-the-head that clinicians use to guide their practice

– One person’s mental embodiment of their knowledge-in-practice-in-context (K-i-P-i-C)

– Flexible, malleable, practical, contextual
What’s in a mindline?

- local norms/ routines
- role models’ behaviour
- institutional culture
- peer values
- guidelines
- embedded science
- rules of thumb
- heuristics
- illness scripts
- trainer’s /teachers’ norms
- tacit experiential knowledge
- practical skills
- soft skills
- technical skills

Gabbay & le May, *BMJ* 2004;329:1013
Gabbay & le May, *Practice-based Evidence* 2011
Mindlines: sources of “evidence”

Gabbay & le May, *BMJ* 2004;329:1013
Gabbay & le May, *Practice-based Evidence* 2011
<table>
<thead>
<tr>
<th><strong>Networks</strong></th>
<th><strong>Peers</strong></th>
<th><strong>Patients</strong></th>
<th><strong>Textbooks</strong></th>
<th><strong>Professional meetings</strong></th>
<th><strong>Local/Local guidelines</strong></th>
<th><strong>Websites</strong></th>
<th><strong>Integration plans/pathways</strong></th>
<th><strong>Mentoring</strong></th>
<th><strong>Education (study days, teaching/mentoring)</strong></th>
<th><strong>Systematic Reviews</strong></th>
<th><strong>Audit/Complaint</strong></th>
<th><strong>Drug/Devices</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The transformation of many sources & types of evidence
Ethnographic findings

• Not just clinical but **multiple simultaneous roles**

• Not guidelines but **mindlines**

• Not only knowledge but **knowledge-in-practice-in-context**

• Not only expertise; **contextual adroitness** too

• Not just individual but **collective mindlines**
Collective mindlines
Communities of Practice

"... groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their understanding and knowledge of this area by interacting on an ongoing basis. ...

These people don't necessarily work together ... day-to-day ... but they get together because they find value in their interactions. As they spend time together, they typically share information, insight, and advice. They solve problems. They help each other.”

Wenger, McDermott and Snyder (2001: 4/5)

Respectful dialogue
Examples of Communities of Practice (from our ethnography)

- GPs’ coffee room
- Practice meetings
- Subgroups (e.g. treatment room; diabetes group)
- Local networks e.g. dining club
- Regional and national networks

All continually introducing, transforming and integrating (or rejecting) new knowledge
We’d like to use this evidence-based dressing

I’ve heard about this treatment. It sounds great… I’d like it!!
Formal view

Collective (CoP) view

Mindline

Client’s concepts

Why is the new dressing gone?

‘negotiated’ individual consultation

My cat doesn’t like it
24 Hearts
Diuretics
ACE inhibitors
Echocardiographs
Open access echocardiography
Political goals
Inventors
Drug companies
Manufacturers
Heartshire hospital
Doctors
Local GPs
Civil servants
Pharma reps
Drug companies
Research funders
Universities
Royal colleges
Medical magazines
Popular opinion leaders
Exhortations
Practice managers
Practice nurses
NHS management
Local managers
Performance targets
Cardiology department
Local GP opinion leaders
National opinion leaders
Key hospital doctors
Chief cardiologist
Research findings
Published evidence
Journals
Local guidelines
Local guidelines
EBM movement
Community Health Council
Researchers
Mass mailshots
Audit results
Practice nurses
Community Health Council
Gabbay & le May 2011, based on Dopson et al 2001
Cardiologists
Gabbay & le May 2011, based on Dopson et al 2001
Summary of ethnographic findings

- Not just clinical but **multiple simultaneous roles**
- Not guidelines but **mindlines**
- Not only expertise; **contextual adroitness** too
- Not only knowledge but **knowledge-in-practice-in-context**
- Not just individual but **collective mindlines**
- Not unrefined knowledge but **negotiated knowledge (s)**
- Not knowledge transfer but **knowledge transformation (s)**
**Practical Implications**

- KIPIC/ mindlines means that every practitioner transforms and uses knowledge differently for good reason. So:
  - don’t just use top-down directives; use participatory respectful dialogue, maximising existing social processes (e.g. CoPs) to help practitioners optimise their use of knowledge to get the best results
  - don't expect to find ‘raw’ evidence in practice – it will have been adapted into mindlines
  - don’t focus on theoretical knowledge; encourage co-construction (researchers, practitioners, users, educators) so that research is tied to KIPIC

- People inevitably meld different types of knowledge. So:
  - train them to critically appraise & evaluate all sorts of evidence, not just research
Finally, if you’re trying to use new knowledge to improve practice:...

The Improvement Pyramid

Gabbay, le May et al. The Health Foundation 2014
Gabbay, le May et al. BMJ Quality and Safety 2017
Thank you

John Gabbay  jg3@soton.ac.uk
Andrée le May  aclm@soton.ac.uk


Gabbay J, le May A.  Evidence-based guidelines or collectively constructed "mindlines"? Ethnographic study of knowledge management in primary care. BMJ  2004;329:1013-16

Gabbay J, le May A, Connell C, Klein JH.  Balancing the skills – the need for an improvement pyramid. BMJ Qual Saf 2017 . DOI:10.1136/bmjqs-2017-006773