

Primary care practitioners based everyday practice on internalised tacit guidelines derived through social interactions with trusted colleagues

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

Q How do primary care practitioners (general practitioners [GPs] and practice nurses) use evidence in their day to day decisions about patient management?

DESIGN

Ethnographic study.

SETTING

A rural teaching practice ("Lawndale") and a university based inner city practice ("Urbchester") in the UK.

PARTICIPANTS

9 physicians, 3 nurses, a phlebotomist, and associated administrative staff from the Lawndale practice.

METHODS

In the Lawndale practice, data were collected on use of information in clinician-patient interactions in 10 GP surgeries, 4 nurse clinics, 9 practice meetings, and various other meetings using non-participant observation, semistructured formal and informal interviews, and documentary review of guidelines or practice protocols. Observations and interviews were either tape recorded or recorded in field notes. Thematic analysis led to derivation of a theoretical model of the ways in which evidence and information became built into clinical or policy decisions. The model's transferability and credibility were assessed using data collected from observations and interviews held at the Urbchester practice (3 GP surgeries).

MAIN FINDINGS

A theoretical model was derived to illustrate the ways in which evidence and information became built into clinical or policy decisions. *Use of guidelines.* The authors observed that individual clinicians did not go through the steps usually associated with a "linear-rational" model of evidence-based health care (EBHC). None of the GPs were observed to use easily accessible expert systems or the internet to solve clinical problems in real time. They accessed paper and electronic guidelines primarily to prepare for practice meetings on updating specific clinical policies or, more informally, to ensure that their own practice was up to standard. Nurses used guidelines when they encountered unfamiliar problems; however, once familiar with a procedure, they seldom looked at the guideline again. *Networks.* Clinicians almost always took shortcuts to acquire what they thought to be the best evidence from sources they trusted. Nurses relied on localised links with practice doctors and community nurses affiliated with the surgery. Through social networking, clinicians learnt which colleagues to trust. Clinicians rarely questioned if these sources used the linear-rational process often linked with EBHC, or even if their views were based on explicit research evidence. *Mindlines.* Clinicians rarely accessed, appraised, or used explicit evidence directly from research or other formal sources. Instead they relied on "mindlines" or "collectively reinforced, internalised tacit guidelines, which were informed by brief reading, but mainly by their interactions with each other and with opinion leaders, patients, and pharmaceutical representatives and by other sources of largely tacit knowledge that built on their early training and their own and their colleagues' experience." These mindlines

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were refined by acquiring tacit knowledge from trusted sources in ways that were mediated by organisational features of the practices (eg, financial features and the nature and frequency of meetings). Although mindlines were "stored" in participants' minds, they could be shared, tested, and internalised through discussion. Individual mindlines were adjusted by checking them against learning from brief reading, discussions with colleagues, and audit or critical incident meetings. As well, patient input could influence the application or continued development of mindlines.

CONCLUSIONS

Use of evidence and knowledge in the day to day practice of primary care practitioners was based on socially constituted knowledge. Collectively reinforced, internalised tacit guidelines, or *mindlines*, were iteratively negotiated with trusted colleagues through a range of informal interactions.

Commentary

Gabbay and le May use the relatively uncommon research technique of observation to investigate primary care practitioners' derivation and use of knowledge during clinical and non-clinical encounters. Similar to other studies in the UK and North America, clinicians favoured experiential knowledge over text or electronic sources.¹⁻⁶ Cogdill² found that North American nurse practitioners used physician colleagues for resolving diagnostic uncertainty and text based drug reference manuals restricted to medication related uncertainty. Cogdill,² like Gabbay and le May, found no instances of uncertainty-driven use of computer based information sources. Interviews with 24 UK GPs⁶ found that when faced with clinical uncertainty, GPs consulted practice partners and hospital doctors. Covell *et al*¹ found that although individual US physicians claimed that they accessed research via media such as journals, the observed reality was that they consulted colleagues from their own and other professions.

Gabbay and le May suggest that clinicians derive knowledge for practice from collectively reinforced, internalised, tacit guidelines constituted from experience and interactions with trusted others. These findings echo the trust placed in clinical nurse specialists in a UK study of clinical decision making in 108 hospital nurses.⁵

It seems that clinicians in clinical settings favour human sources of information rather than the explicit codified knowledge sources usually identified with evidence-based practice (eg, guidelines and online databases). Relying on human sources does have risks: systematic errors and biases from the intuitive consideration that accompanies such knowledge transfer⁷ and the possibility that such information lacks a credible foundation. The findings of Gabbay and le May suggest that a human dimension to planning for knowledge transfer should figure in the development of research implementation strategies.

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