Information needs in primary care















Introduction - objectives



- To describe
 - the information needs of primary care clinicians
 - the barriers to meeting information needs
 - how information might be used to support evidence based health care
 - the role of information services in facilitating evidence based health care
- Explore teleconferencing to share learning and experience

Why is this important?



Breadth of primary care

Information jungle

Changing roles in primary care

"Resourceful patient" (1)

Scenario



Mrs Brown attends surgery. She is 78, has been fit and well all her life and is the main carer of her husband who has been wheelchair bound since a stroke last year.

She recently developed indigestion and (reluctantly) had an endoscopy which she found distressing. The gastroenterologist told her she has "Barrett's oesophagus".

He explained she would need to have endoscopies every two years, because of her risk of getting cancer. He also advised her to take medicine (lansoprazole) all her life. She is extremely anxious about all this - only last year her brother died of cancer.

Information needs -interactive exercise



Imagine you are the primary care clinician trying to help this patient.

What information would help you manage this patient?

Make a list of the information needs or questions which arise

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Information needs



Published information

The "evidence"

The patient health record

Patient values, concerns, preferences

Evidence based medicine



- Convert information needs into answerable questions
- Track down the best evidence
- Critically appraise the evidence to assess validity and relevance
- Implement results into practice
- Evaluate performance (2)

Locating EBM in primary care



Cultural and organisational factors

Reflective practice

Evidence based medicine

Information is not enough!



Information needs

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Information seeking

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Information use

Interactive exercise Answering questions



- Librarians Why may you not have heard from Mrs Brown's GP with a question?
- Health professionals Why may you not have asked a librarian for help with your questions?

Things we know about GPs' questions



- How many? between 0.5 per half day and 2 per 3 patients (3-6)
- Most (70%) are not pursued (3,4)
- May be higher for nurse practitioners?
- Factors influencing whether a question is pursued include (5)
 - belief that an answer exists
 - problem of an urgent nature

And...



- GPs are more likely to ask a colleague than pursue other routes to answer a question (3)
- Most GPs support the notion of EBM (8)
- Only 5% of GPs feel that the best way to move towards EBM is by identifying and appraising primary literature and systematic reviews themselves (8)

Perceived barriers to practising EBM



- Lack of personal time
- Personal and organisational inertia
- Problems with the "evidence"
 - Lack of evidence
 - Evidence not related to the primary care context
- Attitudes of colleagues
- Patients' expectations (8)

Obstacles to answering questions

- Finding information excessively time consuming
- Modifying original question
- Selecting optimal search strategy
- Knowing when to stop the search
- Failure of an information resource to cover the topic
- Synthesising multiple source of evidence into a clinically useful statement (9)

From EBM to "Information Mastery"



- EBM takes too long
- "Information mastery" is a more realistic alternative (10)
- Shaughnessy's "usefulness equation"

Usefulness = relevance x validity / work

In other words...



- Relevant knowledge
- Right time
- Right place
- Right amount
- Right format (11)

Imperial informaticist project



- "Path lab" analogy
- Strong research component
 - Detailed recording of "process"
 - Data collection about the questions
 - User satisfaction / usefulness of answers
- Standardised approach to answering questions
 - Search cascade
 - Focus on academic rigour of answers (12)

Use of the service



- In 10 months, 22 of 34 participants used service
- 60 questions (2/3 on therapy)
- Wide variability in use of service
 - 14/60 questions from one group practice
- Without the service
 - 1/3 would take "no action"
 - 1/3 would "ask a colleague"
 - -1/3 other forms of action e.g. books (12)

Answering questions



- Time consuming (median 130 mins) (12,13)
- Median "turnaround" time 9 days
- 72% questions answered within 2 weeks
- Requested timescales met for 82% of questions
 - Only 12% answers were requested in less than 1 week
 - 2/3 answers requested between 1 and 3 weeks (12)

What did they ask?



- Does breast examination reduce mortality from breast cancer?
- Is quinine sulphate effective for nocturnal leg cramps?
- In a 73 yr old lady with osteoarthritis, does oral glucosamine reduce pain or slow onset of disease?

Was the service valued?



- High levels of satisfaction with answers
- 1/3 answers changed management (index patient)
- 1/2 answers would change management (future)
- Other spin-offs :
 - promoted discussion
 - provided reassurance
 - led to new learning
 - encouraged further use of the service
 - led to consideration of a piece of research (12)

Models of service



Imperial (14, 15)	Basildon (15, 16)
"like a laboratory test service"	"friendly local facilitator"
Low emphasis-personal contact	High emphasis-personal contact
Strong research component	Strong service component
Focus on academic rigour and technical excellence	Focus on identifying important questions through face to face dialogue
All relevant primary and secondary sources identified and appraised	Pragmatic approach — "find out what we can and share it" using easily accessible sources
None of project team involved in local service general practice	Strong local links of project leader (a local GP) enabled integration into a clinical effectiveness unit

Two dimensions





High

Questions from wide a range of practitioners High quality answers that are implemented and disseminated in practice

Facilitation of questioning behaviour

Low

High

Low

Bridging the divide



- Clinician / information specialist gap
 - close working links are rare
 - practice information management focussed on patient records
 - the geographical divide
 - the "cultural divide" (17)

Need for partnership



- personalised community based services
- explicit aim of facilitating information seeking
- tailor service / information provided to the context
- trust between professionals
- flexibility to adapt to varying organisational cultures
- "problem orientated" approach (18, 19)
- integration of information services into primary care, akin to clinical medical librarianship? (20)

Conclusions (1)



- Primary care information needs vast /expanding
 - originate largely from direct patient care
- The implementation of EBM is much more complex than the plugging of "information gaps"
 - it is not likely to be achieved by individual practitioners searching for and appraising evidence themselves
- The process of meeting information needs, using the evidence based approach is time-consuming

Conclusions (2)



- Providing quality answers to questions can result in real change in practice
- Information providers need to combine academic and service dimensions
- Primary care professionals need to work with information specialists to identify ways of shaping services to meet local contextual variations

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