Step 4. Introducing evidence into practice

HealthConnect International
Irina Ibraghimova
ibra@zadar.net
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Studies in the US and the Netherlands (2003)

- 30-40% patients don't receive care according to current scientific evidence
- 20% or more of care provided is not needed or potentially harmful to patients
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4 levels of implementing change

- individual level
- healthcare groups/teams
- healthcare organizations
- healthcare systems

Barriers to /incentives for change (6 levels)

- **Innovation -** advantages in practice, accessibility, attractiveness
- **Individual professional** - awareness, knowledge, attitude, motivation to change, behavioral routines
- **Patient** - knowledge, skills, attitude, compliance
- **Social context** - opinion of colleagues, culture, collaboration, leadership
- **Organizational context** -staff, resources, structures
- **Economic and political context** - financing, regulations, policies

Changes you have experienced

- Why was the change introduced?
- How have people responded to the change?
- Has the change been sustained?

Organizational culture models

- **Power culture** (central control)
- **Role culture** (people do their work and don't interfere with others)
- **Task culture** - professionals form a practice, and organization provides support and administration
- **Person culture** - people work together to achieve results, often form project teams across the organization

Responses to change

- **Denial** (the need of change)
- **Defence** (of their job, their territory)
- **Discarding** (of old habits)
- **Adaptation** (adapting behavior)
- **Internalization** (new relationships and ways of working become accepted)

Your vision of change

- Why do you wish to change? What is the current problem?
- How much will you need to change?
- What will the new arrangements look like once change has been implemented?

Barriers/driving forces

- What were the reasons for success/failure?
- What could be the barriers / driving forces?

10-step model for inducing change

1. Promote awareness of innovation
2. Stimulate interest and involvement
3. Create understanding
4. Develop insight into own routines
5. Develop positive attitude to change
6. Create positive intentions/decisions to change
7. Try out change in practice
8. Confirm value of change
9. Integrate new practice into routines
10. Embed new practice in organization

Research-to-practice pipeline

- **Awareness**
- **Acceptance**
- **Applicable**
- **Available & able**
- **Acted on**
- **Agreed to (**patient**)**
- **Adhered to (**adherence rates for medications are less than 50%)

Methods of implementation (CASP)

- building alliances
- using change agents
- disseminating information
- providing education and training
- enabling and supporting practice

Disseminating information

- CATs
- Short abstracts
- Drug formularies
- E-mail lists
- Clinical practice guidelines

Teaching/Learning EBM

- Lectures
- Small-group workshops
- Specific project work
- Distance learning
- Journal club
- Educational field trips
- Standard practice review
- Specially designed curricula for different groups

Educational interventions - hierarchy of methods

- **Level 1**, interactive and clinically integrated activities;
- **Level 2(a),** interactive but classroom based activities;
- **Level 2(b),** didactic but clinically integrated activities;
- **Level 3,** didactic, classroom or standalone teaching

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Didactic vs Integrated/Interactive

Supporting practice

- Development of protocols
- Development of practice guidelines
- Development of standards
- Use of audits and analysis
- Computer-assisted decision-support systems

What works?
Postgraduate teaching in EBM?

- Standalone teaching improved knowledge but not skills, attitudes, or behavior
- Clinically integrated teaching improved knowledge, skills, attitudes, and behavior

What works?
Changes in practice?

- multifaceted EBM intervention consisting of teaching EBM skills and provision of electronic evidence resources
- educational outreach visits
- opinion leaders
- one-to-one conversations with an expert
- computerized alerts/reminders
- targeted audit and feedback
- computerized decision support systems

What does not work?

- Didactic approaches to educating physicians and/or other health professionals do not produce changes in learner behavior
- Printed materials and practice guidelines have not been shown to change prescribing behavior

Patient behavior change

- Interactive Health Communication Applications (IHCAs) are computer-based, usually web-based, information packages for patients that combine health information with at least one of social support, decision support, or behavior change support
- Patient Decision Aids

Cochrane Effective Practice and Organization of Care Group

- **Audit and feedback: effects on professional practice and health care outcomes** (the effects are generally small to moderate)
- **Computerized advice on drug dosage to improve prescribing practice (c**omputer support for drug dosage gave significant benefits)

- **Tailored interventions to overcome identified barriers to change: effects on professional practice and health care outcomes**

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