



IDENTIFYING AND OVERCOMING BARRIERS TO GUIDELINE IMPLEMENTATION

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Guideline Adoption and Use

- Systematic review of studies of guideline use found adoption and adherence was low even when awareness of and agreements with the guidelines among target users was high
- Contextual factors which influence and determine guideline adoption and use:
- at levels of
 - Professional
 - Patient
 - Institutional
 - System

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Determinants of Healthcare Practices: Barriers and Facilitators

- Guideline factors
- Health professional factors
- Patient factors
- Incentives and resources
- Capacity for organizational change
- Social, political and legal factors

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Methods to Identify Determinants of Healthcare Practices: Barriers and Facilitators

- Brainstorming
- Focus group
- Performance data analysis
- Observations
- Interviews
- Questionnaires

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Identifying Determinants of Care for Tailoring Implementation in Chronic Diseases: an evaluation of different methods

Methods:

- Study in 5 European countries, recommendations for a different chronic condition in each country.
- Methods compared directly: brainstorming amongst health professionals, interviews of health professionals, and interviews of patients.
- Additional value of discussion structured through reference to a checklist of determinants in addition to brainstorming, and determinants identified by open questions in a questionnaire survey, investigated separately



Identifying Determinants of Care for Tailoring Implementation in Chronic Diseases: an evaluation of different methods

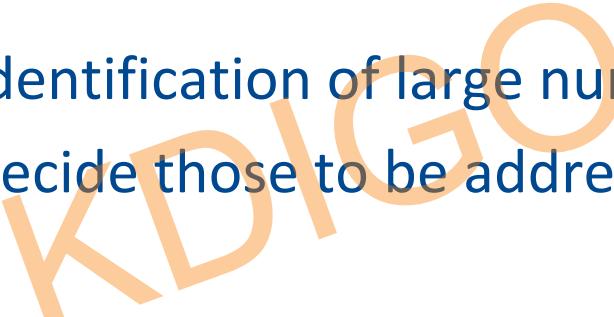
Results:

- 601 determinants judged to be plausibly important were identified.
- 609 determinants were judged unlikely to inform an implementation intervention, and classified as not plausibly important.
- Brainstorming identified 194 of plausibly important determinants, health professional interviews 152, patient interviews 63, open question 48.
- Group discussion identified 144 plausibly important determinants in addition to those identified by brainstorming

Identifying Determinants of Care for Tailoring Implementation in Chronic Diseases: an evaluation of different methods

Conclusions:

- Systematic methods can lead identification of large numbers of determinants.
- Tailoring include a process to decide those to be addressed by implementation interventions.
- To identify determinants, combination should be used.
- Brainstorming as a simple, low cost method relevant to many tailored implementation projects



Tailored Interventions to Overcome Identified Barriers to Change: Effects on Professional Practice and Health Care Outcomes

Evans 1997

Methods	RCT
Participants	134 staff in child health clinics Diagnosis and management of childhood asthma
Interventions	Barriers analysis: focus groups Barriers: clinical uncertainty, administrative constraints Theory: planned organizational change, learner centred teaching Intervention: <ol style="list-style-type: none">teaching sessions, discussions of patients, tutorial for physicians, monthly educator visitsguideline tailoring: moderate
Outcomes	Professional practice: identification of patients with asthma, continuity of care, use of medication, patient education

Tailored Interventions to Overcome Identified Barriers to Change: Effects on Professional Practice and Health Care Outcomes

Flottorp 2002

Methods	RCT
Participants	142 general practices Management of urinary tract infection in women and sore throat
Interventions	Barriers analysis: literature search, discussion with the guideline development group, brainstorming, focus group interviews with patients and GP assistants, a pilot study, discussion groups, and informal interviews Barriers: patient expectations, financial disincentives, administrative constraints, other Theory: none Interventions: <ol style="list-style-type: none">summary of guideline recommendations, patient educational material, computer based support and reminders, increased fees for telephone consultations, printed material to facilitate discussions, interactive courses for GPs and practice assistants, CME point for participantsno intervention
Outcomes	Professional practice: rates of use of antibiotics, laboratory tests and telephone consultations

Tailored Interventions to Overcome Identified Barriers to Change: Effects on Professional Practice and Health Care Outcomes

Schouten 2007

Methods	RCT
Participants	Hospital staff caring for patients with community acquired pneumonia Antibiotic use in pneumonia
Interventions	<p>Barriers analysis: individual and group interviews</p> <p>Barriers: clinical uncertainty, administrative constraints, other</p> <p>Theory: none</p> <p>Interventions:</p> <ol style="list-style-type: none">lecture, feedback, critical care pathway, plus facilitated modules specific to each intervention siteno intervention <p>Tailoring: high</p>
Outcomes	<p>Professional practice: adherence to 15 guideline recommendations</p> <p>Health outcomes: length of stay, mortality, intensive care unit admission</p>

7 Domains of Factors in the Integrated Checklist of Determinants of Practice (TICD Checklist)

1. Guideline factors
2. Individual health professional factors
3. Patient factors
4. Professional interactions
5. Incentives and resources
6. Capacity for organizational change
7. Social, political and legal factors

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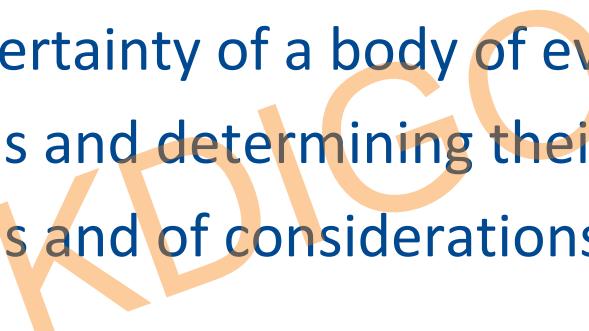
Checklist for a Successful Guideline Enterprise

1. Organization, budget, planning and training
2. Priority setting
3. Guideline group membership
4. Establishing guideline group processes
5. Identifying target audience and topic selection
6. Consumer and stakeholder involvement
7. Conflict-of-interest consideration
8. Question generation
9. Considering the importance of outcomes and interventions, values, preferences and utilities
10. Deciding what evidence to include and searching for evidence



Checklist for a Successful Guideline Enterprise (con't)

11. Summarizing evidence and considering additional information
12. Judging quality, strength or certainty of a body of evidence
13. Developing recommendations and determining their strength
14. Wording of recommendations and of considerations of implementation, feasibility and quality
15. Reporting and peer review
16. Dissemination and implementation
17. Evaluation and use
18. Updating



Guideline Implementability

- Content and format of guidelines that facilitate their adoption
- Cochrane systematic review *confirmed guideline implementation tools (GI tools) developed and disseminated with guidelines influenced clinical behaviour and patient outcomes
- Systematic reviews show implementation tools: guideline summaries, algorithms, point-of-care checklists, health status reminders enhanced compliance with guideline recommendations

* Flodgren et al (2016)

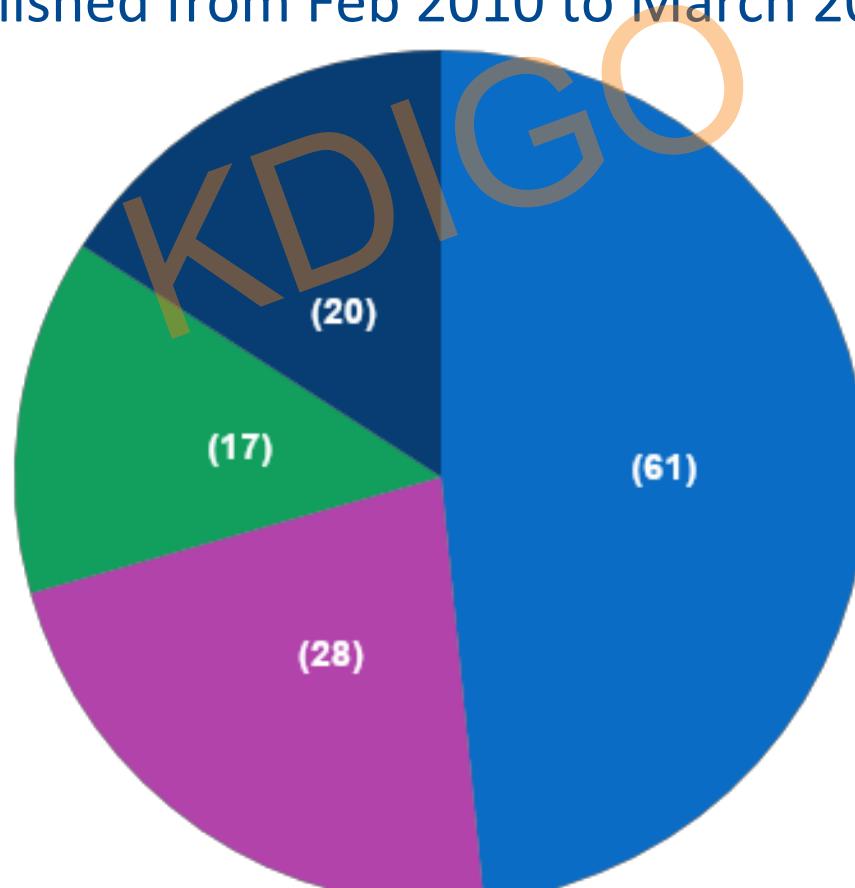
Framework of Types of Guideline Implementation (GI) Tools

Category	Type	Description
Patient Support	Information	Print or electronic information about the condition, management options, or sources of information
	Guideline summary	Short versions of guidelines for patients and care partners
	Self-management support	Resources such as charts, templates, and action plans used by patients to better manage their disease and daily activities
Clinician Support	Guideline summary	Short versions of guidelines in print or electronic format including pocket cards, summaries, or applications
	Algorithm	Flowcharts or clinical pathways
	Form or checklist	Print or electronic documents completed by clinicians
Implementation Support	Training material	Resources to support educational meetings or self-directed learning
	Resources	Human, infrastructure or funding resources
Evaluation Support	Audit tools	Guidelines or manuals to support the evaluation
	Measures	Quality indicators or performance measures to assess compliance with guideline recommendations

Number and Type of Guideline Implementation Tools

Guideline characteristics

- Total of 126 guidelines published from Feb 2010 to March 2017



Number and Type of Guideline Implementation Tools

Guidelines with GI tools

- 85 (67.5%) of the 126 guidelines accompanied by one or more GI tools

GI tools per guideline

- Mean number of GI tools per guideline was 5.5 (median 4.0, range 1 to 28)

GI tools characteristics

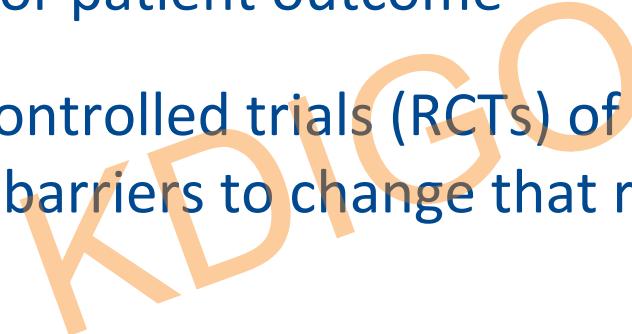
- Informing and supporting decision-making among clinicians (239, 51.5%)
- Informing and supporting self-management among patients (113, 24.4%)
- Supporting guideline implementation (66, 14.3%)
- Supporting evaluation of guideline-concordant care (46, 9.9%)



Tailored Interventions to Overcome Identified Barriers to Change: Effects on Professional Practice and Health Care Outcomes

Objective: the effectiveness of interventions tailored to address identified barriers to, change on professional practice or patient outcome

Selection criteria: randomised controlled trials (RCTs) of interventions tailored to address prospectively identified barriers to change that reported objectively measured professional practice



Main results: 26 studies comparing an intervention tailored to address identified barriers to change to no intervention or intervention(s) not tailored to the barriers

Authors' conclusion: interventions tailored to prospectively identified barriers are more likely to improve professional practice than no intervention or dissemination of guidelines

Patient-mediated Interventions to Improve Professional Practice: Cochrane systematic review

Patient-mediated interventions

“any intervention aimed at changing the performance of healthcare professionals through interactions with patients, or information provided by or to patients”

Patient-mediated Interventions to Improve Professional Practice: Cochrane systematic review

Results

- 25 randomized studies with a total of 12,268 patients
- 4 types of patient-mediated interventions
 - 1) **Patient-reported health information interventions:** information of patients' own health, concerns or needs
 - 2) **Patient information interventions:** patients informed about, or reminded to attend recommended care
 - 3) **Patient education interventions:** increase patients' knowledge about their condition and options of care
 - 4) **Patient decision aid interventions :** provided with information about treatment options including risks and benefits



Patient-mediated Interventions to Improve Professional Practice: Cochrane systematic review

1) Patient-reported health information interventions:

Probably improve healthcare professionals' adherence to recommended clinical practice, moderate certainty evidence for every 100 patients consulted or treated, 26 (95% CI 23-30) in accordance with recommended clinical practice compared to 17 per 100 in the comparison group (no intervention or usual care)

2) Patient information interventions:

May improve healthcare professionals; adherence to recommended clinical practice, low certainty evidence for every 100 patients consulted or treated, 32 (95% CI 24-42) are in accordance with recommended clinical practice compared to 20 per 100 in the comparison group

Patient-mediated Interventions to Improve Professional Practice: Cochrane systematic review (con't)

3) *Patient education interventions:*

Probably improve healthcare professionals' adherence to recommended clinical practice, moderate certainty evidence for every 100 patients consulted or treated, 46 (95% CI 39- 54) are in accordance with recommended clinical practice compared to 35 per 100 in the comparison group

4) *Patient decision aid interventions:*

Little or no effect on healthcare professionals' adherence to recommended clinical practice, low-certainty evidence for every 100 patients consulted or treated, 32 (95% CI 24 – 43) are in accordance with recommended clinical practice compared to 37 per 100 in the comparison group

Theoretical Domains Framework of Behaviour Change to Investigate Implementation Problems

Theoretical Domains Framework (TDF)

- Developed for implementation research to identify influences on health professional behavior related to implementation of evidence-based recommendations
- Integrated theoretical framework synthesized from 128 theoretical constructs from 33 theories judged most relevant to implementation questions

Theoretical Domains Framework

Knowledge	An awareness of the existence of something
Skills	An ability or proficiency acquired through practice
Social/ professional role and identity	A coherence set of behaviours and displayed personal qualities of an individual in a social or work setting
Beliefs about capabilities	Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use
Optimism	The confidence that things will happen for the best or that desired goals will be attained
Reinforcement	Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus
Intentions	A conscious decision to perform a behavior or a resolve to act in a certain way
Goals	Mental representations of outcomes or end states that an individual wants to achieve
Memory, attention and decision processes	The ability to retain information, focus selectively on aspects of the environment and choose between 2 or more alternatives
Environmental context and resources	Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behavior
Social influences	Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours
Emotion	A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event
Behavioural regulation	Anything aimed at managing or changing objectively observed or measured actions

Improving Outcomes with Guidelines

- Development
- Implementability
- Implementation
- Adoption, adherence and use
- Evaluation
- Sustainability

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Sustainability of Guidelines Use and Impact

❑ Determinants

- Design and characteristics
- Organisational context and factors
- Socio-economic and political environment and factors

❑ Sustainability as institutionalisation and routinisation into organisational systems

Thank you