

SYNTHESIS

DISSEMINATION STRATEGY FOR CLINICAL PRACTICE GUIDELINES IN BELGIUM





Belgian Health Care Knowledge Centre

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Finally, this report has been approved by common assent by the Executive Board.

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■ FOREWORD

All those who are involved in care-quality initiatives are well aware of the phenomenon: despite all the highly scientifically, evidence-based, clinical practice guidelines available, there is still a gap between what is recommended and day-to-day practice. The obvious knee-jerk reaction is, to put it bluntly, to lay the blame on the care providers: the fault lies with them because they disregard our wise recommendations, deliberately or inadvertently.

What is more, it is not as though recommendations are lacking: the world is littered with producers of guidelines, whose methodology and quality standards, it should also be said, differ widely. This sometimes leads to duplication and even conflicting messages. But this is not the crux of the problem. For good guidelines, you clearly need experts in the field, ideally assisted by those whose expertise lies in systematic literature review. But convincing others of value of the finished product is something entirely different. Dissemination and implementation research are, indeed, gradually becoming a field of expertise in themselves; they mobilize very different skills and methods, which are not necessarily present in the world of the guideline developers.

This report tries to bring some light to this blind spot and looks at how the knowhow of guideline developers can be channelled to focus on the real needs of those on the ground. We had the benefit of the expert assistance of research teams from the universities of Antwerp and Liège and express our grateful thanks to them for their help. We hope that our joint efforts have put down markers that will optimize the impact of future practice guidelines. Ultimately, a guideline is only useful and of value if patients actually derive some benefit from it.

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■ ABSTRACT

Numerous organizations disseminate many clinical practice guidelines in Belgium: their quality varies and their impact on the practice of health professionals is unknown. The objective of this report is to propose an efficient strategy for the optimal dissemination of these CPGs. The three parts to this study encompass: (1) an overview of the main systematic literature reviews; (2) a description of the Belgian CPG landscape (identification of the stakeholders, inventory of the barriers and facilitating factors for dissemination); (3) a merging between the lessons learned from the literature and the suggestions of the stakeholders for the purpose of identifying proposals for the future.

CURRENT SITUATION

Development of CPGs: a challenging task

The development of Belgian CPGs allows congruence with the Belgian health care situation. Still in practice this development process comes up against numerous obstacles (limited or non-existing budgets, difficulty to find authors, poor motivation and cumbersome collaboration between institutions). Some organizations adapt CPGs from other countries, a process that also requires a substantial amount of work if formal procedures (cf. ADAPTE methodology) are followed, which is not always the case.

Dissemination of CPGs: a complex landscape...

Numerous Belgian organisations have published CPGs, sometimes on the same subject, without necessarily reaching the targeted professions. The most frequent dissemination strategies are "paper" or electronic publications; the latter, while less expensive, does have the disadvantage, however, that it reaches the target professionals in a random fashion. The use of additional strategies is not frequent. When this happens, these are usually conferences, sometimes with opinion leaders. Decision support systems, in particular "reminders" integrated in the softwares of the electronic medical records, are in the process of being developed at the initiative of EBMPPracticeNet (a national platform for the coordination of CPGs). Other methods, not reported by the interviewees, exist in Belgium (academic detailing, consensus conferences).



...And countless stumbling blocks

Stakeholders mention numerous obstacles to the dissemination of CPGs in Belgium. The attitude of the health professionals (ignorance or mistrust of CPGs), difficulty in reaching the target group, the multiplicity of information on the same issue with sometimes conflicting messages depending on the source and the cost of dissemination are a few examples.

AVENUES OF IMPROVEMENT

The data from the literature, the analysis of the situation and the proposals made by stakeholders, allow four main building blocks to be identified for the future:

A unique platform for the dissemination of clinical practice guidelines among health professionals

A coordination group would bring together the stakeholders involved in the development and dissemination of CPGs. The activities of this committee would include creating an inventory of existing guidelines, the identification of high-quality guidelines and the identification of priorities for the future (in conjunction with the National Council for Quality Promotion), proposals of editorial committees to draft CPGs on subjects that are common to several health professions.

In concrete terms, a database containing all these CPGs (in French and in Dutch) would be accessible via a single portal (like the EBMPPracticeNet website), easily accessible to all care providers.

Clear messages, various formats

The CPGs should be available in different formats ("pocket", summary, algorithms) in vocabulary adapted to the targeted professionals. In this context, the provision of information at the point of care would be a distinct advantage. The availability of detailed scientific sources at the same time would also be useful for the professionals who wish to know more about the subject.

Home-made guidelines versus an import strategy

Some of the resources currently spent on the development of national CPGs could be re-allocated to the dissemination of international CPGs. An example is the current dissemination of the Finnish Duodecim CPGs by EBMPPracticeNet. Some have, however, suggested adapting guidelines using a pre-defined methodology (ADAPTE, for example).

The importation of a CPG would be restricted to good-quality guidelines (cf. paragraph below). Participation in international development groups is also a possibility to consider.

A label for high-quality guidelines

Only good-quality CPGs should be made available i.e. those that have passed a validation procedure by a recognised authority, either in Belgium or abroad. In some cases, the use of specifically adapted validation procedures could prove useful, in particular for subjects for which little or no evidence exists.

Apart from these four main building blocks, other measures should optimize the dissemination and uptake of CPGs: (1) dissemination that combines several channels ("multifaceted"); (2) the development of decision support systems and their inclusion in the electronic medical record; (3) strategies for improving the awareness of health professionals of CPGs and their participation in the development process; (4) the translation of messages into accessible, understandable information for the patients and (5) adequate, separate financial support.

Finally, some suggested that the way in which the health system is organised and financed should be aligned with the CPGs philosophy and content.



■ SYNTHESIS

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1. OBJECTIVE AND CONTENT OF THE STUDY

The objective of this study is to identify the optimal dissemination and implementation strategies for clinical guidelines in order to propose avenues of improvement in Belgium. The Belgian Centre for evidence-based medicine (CEBAM) submitted this study topic to the KCE, because of the volume of guidelines of variable quality, from various organisations, using different ways of dissemination with unknown impact on the professionals' practice and patients' outcomes.

As a result, the health professional is flooded with a multitude of guidelines of variable quality and may encounter problems sorting the information and selecting the most appropriate evidence that is applicable to an individual patient.

1.1. Parts of the study

This study has three parts:

- **A synthesis of systematic literature reviews on the efficacy of professional interventions for guidelines dissemination;**
- **A qualitative study to describe the guideline landscape in Belgium :**

The researchers first drew up an exhaustive inventory, identifying about 90 organizations that were somehow involved in the development or dissemination of guidelines. Interviews were conducted with representatives of 30 of these organizations. The interviews provided an overview of: (1) the financing sources; (2) their activities in relation to the development and dissemination of guidelines; (3) the stakeholders' perception of the barriers and facilitators affecting dissemination.

The choice of the organizations aimed to provide a broad panel representing:

- professional organizations (e.g. physicians, nurses, midwives, physiotherapists);
 - organizations that finance guideline-related activities (Federal Public Services (SPF/FOD), National Institute for Health and Disability Insurance (INAMI/RIZIV));
 - other organizations involved in guideline-related activities (e.g. CEBAM).
- **Group discussion on proposals to improve dissemination of guidelines in Belgium in the future:**

The research team organized two meetings with representatives of the major associations involved described, to discuss six proposals on how to improve the dissemination of clinical practice guidelines in Belgium. These proposals were based on the results of the literature review and on suggestions from the interviews. They covered the following themes: (1) creation of a national platform for the coordination of guideline activities; (2) multidisciplinary approach; (3) adaptation of international guidelines versus national development; (4) value of a quality label; (5) multifaceted interventions; (6) integration of guidelines into professional education.

The objective was to collect practical and/or political considerations about the implementation of improved dissemination strategies in Belgium and to get innovative ideas about how these proposals could be implemented. Yet making proposals for the future with the people who work in this domain may have biased the results and limited the horizon, in comparison with an external analysis. The use of a strict methodology (i.e. exhaustive inventory, sampling criteria, recording and double coding of the interviews) contributed to limiting these biases and brought a necessary objectivity to the interpretation of the results.



1.2. What is a clinical practice guideline?

The most frequently used definition of clinical practice guidelines is that of the Institute of Medicine: “systematically developed statements to assist practitioner decisions about appropriate health care for specific clinical circumstances”.

Interviews with representatives of Belgian organizations showed that their perception of the definition varied: some interviewees defined clinical practice guidelines as rigorously developed products whilst others focused on the practical aspects and potential uses of these tools in clinical practice.

2. LITERATURE FINDINGS: POSITIVE BUT LIMITED EFFECT OF DISSEMINATION INTERVENTIONS

2.1. Professional interventions for guideline dissemination

The Cochrane Effective Practice and Organisation of Care (EPOC) group has created taxonomy of professional, financial, organisational and regulatory interventions, yielding an inventory of about 50 strategies. The scope of this study covers the professional interventions only, which are also the ones most often covered by the research:

**Table 1 – Classification of professional interventions (EPOC taxonomy, Grimshaw et al., 2004)¹**

Professional interventions	Description/comments
Distribution of educational materials	Distribution of recommendations for clinical care, including clinical practice guidelines, audio-visual materials and electronic publications. The materials may have been delivered personally or through mass mailings.
Educational meetings	Health care providers participate in conferences, lectures, workshops or traineeships.
Local consensus processes	Inclusion of participating providers in discussion to ensure that they agree that the chosen clinical problem is important and the approach to managing the problem is appropriate.
Educational outreach visits	Use of a trained person who meets with providers in their practice settings to give information with the intent of changing provider's practice. The information given may include feedback on the performance of the provider.
Local opinion leaders	Use of providers nominated by their colleagues as 'educationally influential' (...).
Patient mediated interventions	New clinical information collected directly from patients and given to the provider e.g. depression scores.
Audit and feedback	Any summary of clinical performance of health care over a specified period of time. The summary may also include recommendations for clinical action. The information may have been obtained from medical records, computerised databases, or observations from patients (...).
Reminders	Patient- or encounter-specific information, provided verbally, on paper or on a computer screen, which is designed or intended to prompt a health professional to recall information. This would usually be encountered through their general education, in the medical records or through interactions with peers, and so remind them to perform or avoid some action to aid individual patient care. Computer-aided decision support and drugs dosage are included.
Marketing	Use of personal interviewing, group discussion ('focus groups'), or a survey of targeted providers to identify barriers to change and subsequent design of an intervention that addresses identified barriers.
Mass media	(1) Varied use of communication that reaches great numbers of people including television, radio, newspapers, posters, leaflets, and booklets, alone or in conjunction with other interventions; (2) targeted at the population level.



The following sections summarize the conclusions of 23 high quality literature reviews on the efficacy of these strategies.

2.2. Impact on clinical practice and patient outcomes

A significant but small impact on clinical practice

- Reminders, educational meetings, educational outreach visits and opinion leaders have a significant impact on the clinical practice of health professionals, with median changes ranging from 5% to 23 %, according to the intervention and type of outcome.
- Audit and feedback have the smallest impact (median improvement in compliance with the desired practice of below 3%). The effect is noted for single interventions and multifaceted interventions only when audit and feedback are combined with educational outreach visits.
- Printed educational materials as single interventions also have a limited effect (median improvement in compliance with desired practice of between 3% and 13% according to the outcome). An interesting finding is that electronic guidelines do not produce a greater change in practice than printed educational material.
- Interprofessional education is a type of educational meeting that has been developed recently: health and social care professionals use interactive learning to improve interprofessional collaboration and/or health/wellbeing of patients. Interprofessional education as a single intervention has a non-significant impact on practice but does have an effect on clinical practice and patient satisfaction when integrated into multifaceted interventions.

The search did not identify any systematic reviews on patient-mediated and mass media interventions.

Scarce evidence for beneficial patient outcomes

The primary studies rarely analyzed the effect of specific dissemination strategies on patient outcomes. A few studies showed a positive, though very limited impact of the following three strategies: audit and feedback, reminders, educational meetings.

Effectiveness of multifaceted interventions: yes, but which ones?

Multifaceted interventions were supported by many literature reviews. However, there is a lack of evidence on which would be the crucial components or optimal combination of strategies that would most likely improve adherence to guidelines. Moreover, the ideal number of interventions to be included in multifaceted interventions cannot be defined.

2.3. Factors that influence the effect of guidelines dissemination

The paragraphs above showed that the type of intervention and/or their combination influence the uptake by end users. The literature suggests other facilitators and barriers that may influence the success of dissemination:

- Characteristics of the guidelines: guidelines that are easy to understand and to be tried out have greater chance of being used in clinical practice. Less frequently described factors are preference for evidence-based guidelines and the active participation of the target group during development.
- Characteristics of health professionals: the adoption of guidelines is also determined by their receptiveness and agreement with the guidelines. Age and/or experience are also effect modifiers: young or less experienced professionals are more likely to adopt a guideline.
- The patient's opinion and complex needs (co morbidities) may also influence the implementation of a guideline.
- A link with clinical work increases the uptake a.o. messages tailored to the clinical situation, electronic dissemination strategies integrated in the work process of the clinician.
- Time, personnel, work pressure and attitude from peers may play a role.
- Tailored interventions have more chance to produce an effect e.g. practice facilitation tailored to the needs and context of the practice.



Other effect modifiers have been identified: the improvement will be small if the guideline's content is in line with the physician's current practice and when the physician is already well performing according to the recommendations.

2.4. Caution when interpreting the results

A major caveat is the interpretation of the results in terms of changes in clinical practice: numerous studies conclude a statistically significant change in practice while its clinical relevance and the impact on patient outcomes remain questionable.

The systematic reviews included in this review are of high quality but all of the authors emphasized the need to interpret the results with caution given the low quality of the constituent studies: inadequate sample sizes, selection biases (baseline differences between groups), limitations in the description of the methodology, inadequate statistical analysis. Some conclusions of the reviews (e.g. for patient outcomes) are also based on a limited number of studies.

3. DEVELOPMENT OF GUIDELINES IN BELGIUM: THE PRELIMINARY STEP BEFORE DISSEMINATION

The topic of guideline development (including validation) was the starting point of the interviews with representatives of Belgian organizations. The literature highlights the importance of this process in subsequent dissemination of the guidelines.

3.1. Choice of the topics and authorship

Guidelines topics are either chosen by health professionals or by their organizations, occasionally under the influence of the funders (RIZIV/INAMI and Public Federal Services/FOD/SPF). The authors are generally employed by the organization or selected from professional societies or academic institutions (often PhD or Master students). The interviews highlighted major problems with respect to authoring, such as lack of time, lack of manpower, limited financial resources and lack of motivation due to the burden of the development procedure.

3.2. Home-made versus imported guidelines

Some organizations develop their own guidelines, sometimes in collaboration with other organizations. Collaborations are national or international, either one-off or well structured. These collaborations are, in general, positive and fruitful experiences but the stakeholders also note difficulties e.g. language, organizational aspects, different expectations, financing, top-down approach.

The guidelines developers may use two different methodological approaches:

- a strict, standardized method to search for and synthesize the best available evidence;
- a less rigorous approach that combines a literature search, expert opinion and/or consensus, especially when few studies are available on the topic.



Many interviewees questioned the relevance of developing specific Belgian guidelines, often with a huge duplication of work and poor resources and manpower. They suggested focusing more on adaptation of European guidelines. This adaptation process is already a reality: several organizations translate and/or adapt international guidelines for the Belgian context. A recent example is the translation of the Finnish Duodecim guidelines by EBMPPracticeNET (an initiative for the dissemination of guidelines in primary care). Another illustration is the French guideline used by the College of Radiology.

Regular updating is important in any context, but appears to be more problematic for guidelines developed in Belgium.

3.3. Validation: an important but equivocal concept

Validation was considered an equivocal concept in the interviews: it can refer to the content validation or to the methodology of a guideline.

The validation procedure varies according to the organizations. It can be:

- an informal procedure (consensus, expert opinion, testing for feasibility);
- a formal procedure, run by an external body (like CEBAM), usually referring to the validation of the methodology. Although often perceived as a quality label, it is not feasible for many organisations, in particular small professional groups that develop their own (or import) guidelines.

3.4. Views on budgets are not clear

In general, the interviewees had a limited knowledge of the budget needed for development and/or dissemination of guidelines. Many of them mentioned an imbalance between the available budget and the amount of work required.

4. THE COMPLEX LANDSCAPE OF GUIDELINE DISSEMINATION IN BELGIUM

4.1. The Belgian patchwork of guideline dissemination

The dissemination of guidelines in Belgium is complex, as illustrated by the (non-exhaustive) graph in appendix 2.4 of the scientific report. A wide range of organizations disseminate guidelines, sometimes more than one on the same topic, sometimes without any input from other disciplines caring for the same group of patients.

Dissemination of educational material is the rule, sometimes within multifaceted interventions

Most organisations combine paper-based and electronic publications; the small production and dissemination cost of the latter making them an attractive alternative to paper documents.

The addition of other strategies is not frequent. If any, educational meetings are mentioned most often: either face-to-face (conferences, seminars, formal trainings) or through e-learning modules. Local opinion leaders may be used in this context: they are known by colleagues and their involvement can increase the credibility and adherence to guidelines.

Reminders directly triggered by clinical data entered into the patient record are under development by EBMPPracticeNET. The interviewees found these useful if they are short, clear, delivered in an appropriate format and timely way. This finding is in line with the reported effectiveness of this strategy in the literature (see 2.2).

Printed press, radio, television and social media are sometimes used to reach a large population with topics of broad interest (e.g. prevention, public health messages like the campaign against the inappropriate use of antibiotics). An advantage of this approach is that patients and professionals receive a similar message.



Some interventions are less mentioned

Interviewees rarely mentioned educational outreach visits and feedback as dissemination interventions, even though they are used in Belgium:

- Educational outreach visits for general practitioners are supported by the federal agency for medicines and health products (FAGG/AFMPS). They were the topic of a previous KCE report (125) that concluded their limited impact on prescription behaviour;
- Feedback on prescription practice is sent to physicians by RIZIV/INAMI on the initiative of the National Council for Quality Promotion (CNPQ/NRKP).

The interviewees did not report on consensus processes, yet this type of initiative is regularly used by RIZIV/INAMI and some guidelines developers also described consensus as a means of producing and disseminating their guidelines.

Disseminating guidelines is not perceived as straightforward

The interviewees pinpointed many hurdles to disseminating guidelines in Belgium:

- lack of a dissemination plan in the organizations;
- ignorance of the landscape of potential end-users;
- difficulty in reaching the target population;
- health professionals' perceptions (if any) of the value of clinical guidelines;
- health professionals' distrust of the disseminating organization;
- information overload;
- limited use of e-tools by health professionals and their perceived lack of reliability;
- time pressure during the clinical encounter;
- cost of some dissemination strategies, in particular printed material sent by post.

4.2. Suggestions for an effective dissemination: insights from the literature and from the interviews

The choice of guideline dissemination strategy has a major impact on adoption by health professionals, and the Belgian representatives of organizations emphasised further the importance of combining several strategies. Additional factors that determine the impact of guidelines were identified in the literature (see also 2.3) and during the interviews with stakeholders:

Clear, understandable guidelines

Dissemination is facilitated by simple content and comprehensible language. The interviewees also underlined the importance of presenting various levels of information (scientific text, synthesis, decision algorithms). Some interviewees emphasized the importance of a quality label to guarantee high-quality guidelines (see section 3).

Involvement of professionals in the development of the guidelines

The active participation of the target group during the development of guidelines has a positive effect on their subsequent use: the interviewees insisted on the need for involving multiple disciplines in order to share and apply common information (cf. concept of interprofessional education, see 2.2).

Accessible information at the point of care

Getting the right information at the right time is crucial for its use by health professionals. The interviewees spoke about "easily accessible information". The reminders described in 2.1 are a strategy close to clinical decision-making, resulting in better integration of the information into the process of care delivery. The literature shows that a high degree of automation and different channels of electronic dissemination (alerts, reminders etc) facilitate this process, as does the requirement for an active response to an (electronic) reminder.



Changing the attitude of the target group of professionals

Raising the professionals' awareness and familiarity with guidelines, could improve their acceptance of these tools.

Involvement of the patient

In the same way, the patient's opinions and their health status should be taken into account. The interviewees further pinpointed the importance of involving patients during the development of adapted messages for target patients groups.

A positive environment

The electronic environment, the available resources and the attitude of peers or supervisors play a role as well. A specific point mentioned during the interviews was the time required for attending meetings, with the corresponding loss of income. Some interviewees suggested increasing the incentives for continuing professional development to reinforce the use of guidelines.

5. AVENUES OF IMPROVEMENT

The stakeholders who participated to the final discussions further elaborated on a number of proposals to improve guideline dissemination in Belgium.

5.1. A unique platform for the comprehensive dissemination of clinical practice guidelines in Belgium

5.1.1. One coordinating committee

One coordinating group should gather representatives of the organizations involved in guideline development and dissemination e.g. health professionals from various backgrounds, CEBAM, EBMPpracticeNET.

The role of this committee would include the coordination of guidelines-related activities, creating an inventory of existing guidelines, the identification of high-quality guidelines, and the identification of priorities for the future.

The objective is to develop a coherent landscape with an efficient dissemination of all high-quality guidelines used by the Belgian health professionals.

5.1.2. One common database of high-quality guidelines

Many stakeholders agreed on the need for a unique bi- (or tri-) lingual electronic platform with a user-friendly engine to search for guidelines. A common database of all clinical practice guidelines (finalised, under development, under revision) would centralise the information. High-quality guidelines (from Belgium or abroad) should be presented with their source, validation status and level of evidence.

This database would also be a tool for the coordinating group in order to decide on priorities and on a common action plan. The centralisation of guideline information would decrease the time spent searching information and would foster the sharing of information between health professionals.

Some stakeholders mentioned EBMPpracticeNet as a potential candidate to fulfil this task: it is currently expanding to include all parties interested in primary care guidelines. From 2016 onwards they plan to extend the coverage to secondary care as well.



5.2. Clear messages, various formats

The interviewees insisted on the clarity of the disseminated documents i.e. the provision of synthesised, clear and practical information in vocabulary adapted to the targeted professionals. However, the availability of the whole guideline as a reference document is also important.

This could be achieved either in one document or, preferably, in separate documents like pocket-sized documents, index cards or algorithms that can be easily handled during professional activities.

5.3. Home-made guidelines versus an import strategy

Some stakeholders suggested that the efforts for developing local guidelines could be better invested in translation of international guidelines and adaptation to the Belgian health care context. In this case, the imported guideline should be translated into French and Dutch to foster its use by health professionals in the field. Adaptation to the Belgian context is feasible in:

- a formal way e.g. using the ADAPTE methodology: some stakeholders found that this methodology is time-consuming and unknown to some professionals, and/or
- an informal way by field professionals. Other stakeholders feared that expert involvement only would not be a sufficiently rigorous procedure.

A third alternative is to extend a hand to an international group: collaborating within European networks is an opportunity, in particular for specialties and/or if there is a lack of manpower within the Belgian professional organisations. Two illustrations are collaborations within the G-I-N network and within the European Federation of the Associations of Dieticians.

5.4. A label for high-quality guidelines

A common perception among stakeholders about validation is that it gives assurance that no better evidence exists than the evidence proposed in the guideline, i.e. “a quality label” for the end-users.

Which validation procedure?

Validation would be best achieved in close collaboration with experts on the content (who know the literature) and with methodological experts (who check the methodology of the development process).

A “quality label” would require an explicit validation procedure by an external institution in Belgium (like CEBAM) or by an internationally recognized organization (like for example the National Institute for Health and Care Excellence (NICE), the “Haute Autorité de Santé” - France).

The stakeholders suggested that any guideline would be published with information on its validation.

One size does not fit for all: alternatives are welcome

Some stakeholders advocated new ways of achieving validation, given the burden of the current CEBAM validation procedure. In particular, more technical specialties with fast scientific developments could rely on validation procedures similar to the ones followed by scientific societies abroad. Specific validation procedures are also required when little or no evidence is available.



5.5. Other conditions for success

5.5.1. Multifaceted interventions involving a cautious move to electronic support systems

Guidelines should not only be available on a central platform but also linked with the patient's record (as now implemented by EBMPPracticeNET). Some conditions for successful electronic dissemination are e.g. a user-friendly encoding of the clinical data in the medical file of the patient, compatibility between the software of health professionals, a user-friendly search engine, information at the point of care, in native languages, possible feedback on practice.

5.5.2. New professionals' attitudes towards EBM and guidelines

The adherence to guidelines is strongly related to the EBM culture and training of health professionals: the medical faculties and professional societies play a major role in that respect.

5.5.3. Involvement of end-users and translation of information for the patients

The involvement of end-users should be broadened to groups of health professionals other than physicians and also to patients. The stakeholders mentioned the importance of translating the guidelines into accessible, understandable information for the patients.

5.5.4. Budgets

Many stakeholders described difficulties concerning budgets that were "too limited", to either develop guidelines or disseminate them. They emphasized the need for more manpower and more financial resources to develop and disseminate guidelines in the future. Public funding is mandatory to assure the editorial independence of the information. International collaboration might be a way to achieve more efficient development of guidelines although the investment is also sizeable, as stated above (see section 3).

5.5.5. A health care system in line with guidelines philosophy

The stakeholders emphasised the role of the health care system as a whole to support the dissemination and use of guidelines: one suggestion was to create a link between reimbursement rules and guideline content.

6. DISCUSSION

An international quest

The topic proposed by the Belgian Centre for Evidence-based Medicine is in line with a more general search for effective dissemination strategies. One illustration is GIRAnet, the international Guideline Implementability Research and Application network. This collaboration of international guidelines developers, implementers and researchers aims to better integrate guideline development, dissemination and implementation.

The search for effective dissemination strategies fits in the broader movement of implementation science in health care. Dissemination strategies have long been based on the assumption that disseminating the information would change the professionals' practice. There is now an evolution from single- to multi-component tailored approaches that specifically address the barriers to change.

A clinically significant change in clinical practice?

Some strategies seem to have a greater impact than others according to the literature; however, the magnitude of improvement in practice remains limited and the effect on patient outcomes is even more doubtful.

Belgian interventions are in line with the literature findings...

The dissemination of guidelines in Belgium usually relies on strategies that, according to the literature, are expected to have an impact on clinical practice (see 2.2): educational meetings (sometimes with local opinion leaders) and dissemination of printed/electronic educational materials. Reminders are under development by EBMPPracticeNET: their use at the point of care would enhance the effectiveness of the previously mentioned interventions. The literature review and the stakeholders' comments emphasize the importance of multifaceted interventions, yet dissemination plans including multifaceted interventions are still at an early stage in Belgium.



...But lack planning and coherence

The strength of this study is that it offers a comprehensive overview of the Belgian guideline landscape. The lack of vision on dissemination, the multitude of individuals and organizations involved and their parallel activities are striking features. The consequence is that health professionals are lost in a forest of concurrent, sometimes contradictory messages, without knowing which guideline to apply under specific clinical circumstances.

Do not overlook other ways to improve the implementation of guidelines

The policy-makers and guideline disseminators should in mind that other interventions may contribute to an effective uptake of guidelines by professionals. Numerous theories, like the theory of Cabana 1999, are developed on this topic. Organizational changes include changes in record systems, skill mix changes, or adequate record of patients' complaints. Regulatory interventions (e.g. medical liability) and financial measures (e.g. providers' incentives) are also susceptible to change the behavior of health professionals.



■ RECOMMENDATIONS^a

For the attention of the Minister for Public Health, the Insurance Board and the National Council for Quality Promotion (NCQP):

- The formalisation of a coordination group for the dissemination of clinical practice guidelines (CPGs) has to continue along the lines of the framework agreement on the quality of care (Insurance Board note 2010/133):
 - Composition: all of the stakeholders involved in the dissemination of CPGs in Belgium (e.g. authorities, NCQP, research institutions, Colleges of physicians, scientific societies of health professionals, health professionals from the first- and second-lines of care);
 - Tasks:
 - coordination of work relating to the dissemination of CPGs in Belgium,
 - inventory of the CPGs currently available,
 - definition of the criteria against which a CPG can be judged to be of good quality,
 - identification of the CPGs that will be made available to all health professionals in the database referred to below and
 - definition of a future strategy for the dissemination of multidisciplinary CPGs, the subjects of which correspond to the priorities defined by the National Council for Quality Promotion.
- All good-quality CPGs must be centralised in a single database, easily accessible to all healthcare providers via a single portal (such as EBMPPracticeNET):
 - With a clear, uniform presentation, possibly with the help of a communications expert;
 - With a summary presented in the national languages that is easy to consult during patient encounters;
 - With a detailed scientific content accessible to interested professionals.
- The strategies listed above must enjoy adequate budgetary support, not only for the working of the coordination group but also for the single database.
- The professional associations involved in the work of adapting and disseminating good-quality CPGs must also enjoy reasonable budgetary support in order to carry out the work in a professional manner.

^a The KCE alone is responsible for these recommendations.



For the attention of FPS Public Health and the INAMI/RIZIV (National Institute for Health and Disability Insurance):

- The labelling of softwares for health professionals must include criteria for the easy encoding of patient details in order to facilitate the link with the messages of the clinical practice guidelines.

For the attention of the organisations involved in the dissemination of CPGs in Belgium:

- It is vital that an explicit dissemination strategy should be elaborated in order to optimise the impact;
- A combination of interventions (congresses, documents in paper or electronic form, underpinning of the message by opinion leaders within the profession) should be encouraged in place of isolated strategies;
- In particular, automatic reminders incorporated into the patient's electronic record are effective;
- The availability of information adapted to the patient, developed in concertation with patient associations, should facilitate acceptance of the messages in practice. The patient associations and sickness funds have a significant role to play in the dissemination of these messages.

For the attention of the academic institutions and Hautes Ecoles (third-level colleges):

- It is necessary that the EBM culture and in particular, the importance of the use of CPGs in the context of the practice should become an integral part of the basic curriculum of every carer;

For the attention of the professional scientific associations:

- It is necessary that the CPGs become part of the programme of all ongoing further education and training of carers;
- In this context, the intervention by opinion leaders in the profession should play a vital role in the dissemination of the messages of the CPGs.

