# Bridging the worlds of research and policy in European health systems





# Chapter 6

# Knowledge brokering in Belgium: feeding the process of collaborative policy-making

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#### European Observatory on Health Systems and Policies

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health-care systems in Europe.

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#### Key messages

# Key attributes of the national context for knowledge brokering in Belaium

- Belgium is a federal state with frequent turnover of its coalition governments and with distributed authority for making decisions, which means that knowledge-brokering organizations place significant emphasis on building relationships with large numbers of people.
- Health system stakeholders have a formal, significant role in policy-making and they exercise this role with a high degree of coordination within their ranks, which means that they are a significant focus for any knowledgebrokering organization.
- A small number of dedicated health-care research institutions are engaged in knowledge brokering although only one - the Belgian Health Care Knowledge Centre (KCE) – has an explicit mandate to do so.
- The relatively small group of people involved in policy-making generally do not speak English so key documents need to be prepared in Dutch and French.

# Knowledge brokering mechanisms and models in use

- While 10 Belgian knowledge-brokering organizations were carefully considered for inclusion in the BRIDGE study, only three met our eligibility criteria.
- The three organizations tended to use fairly traditional informationpackaging mechanisms and interactive knowledge-sharing mechanisms. Some of the more innovative mechanisms involve the targeting of policymakers, a graded-entry format for information products, and some degree of timing in relation to policy-making processes or to requests from policymakers.
- The three organizations tended not to provide much description of their organizational model or their approach to monitoring and evaluation on their websites.

# Spotlight on a selected knowledge-brokering organization

 The KCE gives policy-makers and stakeholders a governance role and actively seeks their input in the planning and execution of its research projects to ensure its products are relevant for policy-making. KCE has developed a clear separation between the scientific aspects of its reports 4 Bridging the worlds of research and policy in European health systems

and the recommendations that also reflect the contributions of the diverse members of its governing board.

#### Examples of intersections with policy-making processes

- Two cases studies illustrate how a knowledge-brokering organization such as KCE has influenced policy-making by:
  - responding to a question of immediate interest to policy-makers and stakeholders, namely whether to modify the maximum-billing system, a key social protective feature in Belgium; and
  - developing a general approach to a health systems policy issue, namely how to measure health system performance.
- Each case study documents the mixed use of information-packaging mechanisms and interactive knowledge-sharing mechanisms and aspects of the organizational model for knowledge brokering.

#### Lessons learned

- A combination of an explicit mandate for, and resources devoted to, both research and knowledge brokering as well as recognition that knowledge brokering requires a change in culture, not just structure can create opportunities for leadership in the field of knowledge brokering.
- Legitimacy within the policy-maker/stakeholder community can be traced to an organization's reputation for challenging policy-makers and stakeholders constructively with the best available health systems information and to its ability to produce timely, relevant work.
- There are benefits to using a mix of information-packaging mechanisms and interactive knowledge-sharing mechanisms within an organizational model for knowledge brokering that supports the development of trust and coownership of the work.
- A project orientation (i.e. decision support on mutually agreed, specific questions) may need to be complemented by a cross-cutting orientation (i.e. knowledge support on ad hoc and broader questions).

#### Knowledge brokering in Belgium

In this chapter I describe the role of health systems information and knowledge brokering in the Belgian health system policy context, with a particular focus on the KCE. Created in 2002 and operational since 2003, the KCE is a federal public agency with an explicit mission to support evidence-informed health policy-making. After a brief introduction to the Belgian health policy landscape and the role of different federal agencies, I describe the role and working practices of KCE and describe two case studies of its intersections with Belgian policy-making processes.

Data were collected through interviews, document analysis and website research. The author was also involved in KCE from its early start-up period through 2011 and draws on that experience. The information provided here reflects the KCE up to autumn 2010.

# National context for knowledge brokering

Belgium is a federal state with three levels of government operating above the local level: (i) the federal government; (ii) three regions (geographical); and (iii) three communities (language groups: Dutch, French and German). Health policy is a responsibility shared among all three levels. While Belgium has been going through a process of decentralization, a number of the core competencies related to health-care services remain at the federal level, although regions are becoming very important players too. The federal authorities are responsible for the regulation and financing of Belgium's compulsory health insurance system; the determination of minimum standards for the running of hospital services; the financing of hospitals and large medical care units; legislation covering professional qualifications; and the registration of pharmaceuticals and their price control. This chapter focuses on knowledge brokering at the federal policy-making level.

The policy-making processes at the federal level incorporate the tacit knowledge and experiences of policy-makers, stakeholders and scientific experts. Stakeholders are institutionally embedded in a wide range of deliberative and consultative bodies, particularly in the Federal Public Services for Health, Food Chain Safety and Environment (FPS) and the National Institute of Health and Disability Insurance (NIHDI) (Gerkens & Merkur, 2010). Stakeholder participation typically means consultation but ranges up to co-decisionmaking. Although these bodies cannot be seen as knowledge brokers, they play an important role informally through the sharing of field expertise and

<sup>1</sup> Local governments - provinces and municipalities - have some additional, less important responsibilities related to health policy.

experience-based knowledge. Moreover, many of the stakeholders have engaged professional staff and developed organizational units dedicated to providing their representatives in these bodies with background knowledge and technical support. These staff members serve as internal knowledge brokers with a mission entirely focused on the interests of the stakeholders who employ them.

#### Key attributes of the policy-making context in Belgium

Table 6.1 presents some of the key attributes of the Belgian policy-making context for knowledge brokering, including those listed below.

Belgium is a federal state with frequent turnover of its coalition governments and with distributed authority for making decisions, which means that

Table 6.1 Attributes of the Belgian policy-making context that can influence knowledge brokerina

Potential attributes (from the BRIDGE framework, Table 2.3)	Key attributes in Belgium
Salient features of policy-making institutions and processes	
Unitary versus federal state	Federal state
<ul> <li>Centralized versus distributed authority for making decisions about priority problems, policy/programme options, and implementation strategies</li> </ul>	Distributed authority
Single-party versus coalition government	Coalition government
<ul> <li>Infrequent versus frequent turnover of the governing party/coalition and its leadership</li> </ul>	Frequent turnover
Civil service versus political party influence over decision support within government	Political party and stakeholder influence
<ul> <li>Centralized versus decentralized decision support within government</li> </ul>	Decentralized decision support
High versus low capacity for policy analysis within the civil service	Average capacity for policy analysis
Low versus high turnover rate within the civil service	Low turnover within civil service
• Significant versus limited resources to commission supports outside the civil service	Limited resources for supports
Salient features of stakeholder opportunities and capacities for $\epsilon$	engagement
<ul> <li>Formal, significant versus informal, limited role of stakeholders in policy-making</li> </ul>	Formal, significant role
High versus low degree of coordination within stakeholder groups	High degree of coordination
<ul> <li>High versus low autonomy of stakeholder groups from government and from narrow interests within their own memberships</li> </ul>	High autonomy of stakeholder groups
<ul> <li>High versus low capacity for policy analysis within stakeholder groups</li> </ul>	High capacity for policy analysis
• Significant versus limited resources to commission supports outside the groups	Limited resources for supports

Table 6.1 contd

Potential attributes (from the BRIDGE framework, Table 2.3)	Key attributes in Belgium
Salient features of research institutions, activities and outputs	
Small versus large number of strong research institutions involved in the production, packaging and sharing of health systems information	Small number of institutions
Large versus small scale of research institutions	Small-to-medium scale of research institutions
Explicit versus implicit mandate for, and resource commitment to, knowledge-brokering (not just research) activities and outputs	Primarily implicit mandate (except for KCE, described in this chapter)
General features of the national policy-making context	
English (the language of most health systems information) is versus is not spoken in addition to local languages	English not widely spoken so executive summaries of reports always prepared in Dutch and French
<ul> <li>Small (everyone knows each other) versus large size of the population</li> </ul>	Small population
High versus low rates of Internet use	High Internet use
High versus low capacity of local news media for objective reporting	Medium capacity of news media

Note: to highlight ways in which each of these features might help or hinder knowledge brokering, we present the either/or options such that the first option likely simplifies the landscape for a knowledge-brokering organization while the second one likely complicates it.

knowledge-brokering organizations place significant emphasis on building relationships with large numbers of people.

- Health system stakeholders have a formal, significant role in policy-making and they exercise this role with a high degree of coordination within their ranks, which means that they are a significant focus for any knowledgebrokering organization.
- A small number of dedicated health-care research institutions are engaged in knowledge brokering although only one (KCE) has an explicit mandate to do so.
- The relatively small group of people involved in policy-making generally do not speak English so key documents need to be prepared in Dutch and French.

# Knowledge brokering mechanisms and models in use

Historically, a number of institutions, such as the Superior Health Council (SHC) created in 1849 and the Federal Scientific Institute of Public Health (IPH), have played a role in bridging science and policy-making in the Belgian health systems context. However, none had an explicit mandate to engage in knowledge brokering. Moreover, research to support the policy-making process has often been commissioned by the FPS or NIHDI on an ad hoc basis, with longer-term and larger-scale research almost non-existent at the federal level. Indeed, until the beginning of the 2000s, the main providers of support for evidence-informed policy-making were academic research units and independent research agencies even though these groups typically had limited capacity in health systems research. In 2010 the federal audit agency (Cour des comptes/Rekenhof) concluded that the supports for evidence-informed policy-making provided by five public agencies (FPS, IPH, KCE, NIHDI, and SHC) lacked a structured and coordinated approach (Court of Audit, 2010).

Table 6.2 summarizes some common characteristics of the knowledgebrokering mechanisms used in Belgium. The organizations use fairly traditional

**Table 6.2** Knowledge-brokering mechanisms and models used in Belgium

Potential characteristics (from the BRIDGE criteria, Table 2.2)	Common characteristics in Belgium
nformation-packaging mechanisms used	
Traditional versus innovative types of information products used	Most are traditional
Innovative products draw on systematic reviews (part of criterion 3)	Some draw on reviews
Innovative products target policy-makers as a key audience (criterion 5)	Some target policy- makers
Innovative products reviewed before publication by target audience (criterion 6)	
Innovative products highlight decision-relevant information (criterion 7)	Some highlight key information
Innovative products use language designed to be accessible (criterion 8)	Some written in accessible language
Innovative products follow a graded-entry format (criterion 9)	Some follow a graded entry format
Innovative products accompanied by online commentaries (criterion 10)	
Innovative products brought to attention by e-mail (criterion 11)	
nteractive knowledge-sharing mechanisms used	
Traditional versus innovative types of knowledge-sharing mechanisms used	Most are traditional
Innovative mechanisms draw on systematic reviews (part of criterion 4)	
Innovative mechanisms target policy-makers as a key audience (criterion 5)	Some target policy- makers
Innovative mechanisms timed to relate to policy-making or requests (criterion 6)	Some are timed for policy-making
Innovative mechanisms involve pre-circulated products (criterion 8)	
Innovative mechanisms involve the creation of new products (criterion 10)	
Innovative mechanisms involve the announcement of new products (criterion 11)	

information-packaging mechanisms and interactive knowledge-sharing mechanisms. Some of the more innovative mechanisms target policy-makers specifically, follow a graded-entry format (for information products), and are timed to relate to policy-making processes or to requests from policy-makers. Organizations do not provide much description of their organizational model or their approach to monitoring and evaluation on their websites, except for KCE which is described in detail below.

# Spotlight on a selected knowledge-brokering organization

The KCE is an independent, federally mandated organization whose core mission is to be an interface between health systems information and health policy. Funded by the federal government through reallocations from the health ministries (FPS and NIHDI), KCE began operating in 2003 with explicit, legislated obligations:

- to support evidence-based health policy-making by developing research of practical relevance in health care;
- to formulate policy recommendations for each project (but not to be involved in policy decision-making or implementation of recommendations); and
- to establish formal and informal linkages with policy-makers and stakeholder organizations at a variety of levels.

KCE undertakes activities in the domains of clinical practice, health technology assessment and health services research. In this chapter the focus is on KCE's knowledge-brokering activities related to health services research, which is called health systems information for consistency with other chapters.

KCE is required by law to perform studies for, at minimum, the NIHDI, FPS and ministers of health - the main users of health systems information. But the agency works with a wide range of health-care stakeholders and considers them all to be potential target audiences: government (ministers and senior civil servants); health-care providers and institutions; patients and the general public; insurance institutions and companies; the pharmaceutical industry and health technology manufacturers; and international organizations.

Between 2004 and March 2011, the agency published 151 reports, including 43 in the area of health systems information exploring issues related to mental health care, rehabilitation services, legal questions, human resources, financing, and reimbursement for vulnerable patient groups, among many other topics. Reflecting its broad spectrum of work and commitment to scientific rigour, KCE has about 50 employees (about 40 full-time equivalent), many with a PhD, including in-house experts with qualifications in medicine, biomedical sciences, nursing, economics, statistics and sociology. For many projects, an entire study or parts of it may be subcontracted to external scientific teams who work under the supervision of KCE staff and according to the agency's procedures. Every report undergoes an external scientific review.

# Information-packaging mechanisms

KCE uses a variety of information-packaging mechanisms. Here we briefly describe four tools the organization uses to communicate health systems information: (i) research reports with executive summaries; (ii) press releases; (iii) annual reports; and (iv) the website and electronic subscriptions. All are publically available on KCE's website. In addition to these formal knowledgebrokering products, KCE produces material for a scientific audience, such as journal articles and conference presentations.

#### Research reports with executive summaries

All KCE reports draw on synthesized global research evidence that has been assessed by scientific experts for its quality. In most cases, these reports incorporate the tacit knowledge, views and experiences of policy-makers and stakeholders, usually to determine the scope of the study and to reflect on implementation issues in the local context.

Each KCE research report is written using a graded-entry format: an executive summary with recommendations, followed by the core scientific report. This format provides a clear separation between the scientific aspects of its reports and the recommendations that reflect the contributions of the diverse members of its governing board.2 The organization also uses editorial guidelines for clear writing (e.g. key messages for each section summarized in bold) and a standardized template for the presentation of research methods and discussion of the findings.

Theoretically, these reports aim to reach a broad audience of scientists, policymakers, stakeholders and the public, but experience has shown that only experts and scientists working in the study area are likely to read the core report. Policymakers especially appreciate the executive summary and the use of key messages in the core report, as it enables them to quickly scan the more detailed scientific information. Besides not having time to read all the details, they have expressed concern that essential findings might get lost in vast amounts of text. At the same time, policy-makers stress the importance of having the full scientific report to give legitimacy to the executive summary. The core report helps to build trust in the research organization, demonstrating the rigour and transparency of the research process. It also helps to support informed debate by providing details underpinning the analysis and conclusions of the research.

<sup>2</sup> KCE's executive summaries of its reports are featured in the first BRIDGE summary (Lavis, Catallo, Permanand et al., 2013) as an example of an innovative type of information-packaging mechanism.

Belgium's multilingual environment presents an ongoing challenge for knowledge-brokering organizations. KCE decided after its first year of operation to use English for the core scientific reports and to produce the executive summaries in Dutch and/or French, as well as (for most reports) English. The decision to write the core reports in English was primarily based on two reasons: (i) the practical problems (time and cost) related to writing reports in a mixed use of Dutch and French; and (ii) a growing awareness that KCE's research was relevant internationally as well as locally. Using English also opened more opportunities to select external expert reviewers to validate the reports. The language of the research reports, along with their writing style and length, is a matter of ongoing debate for KCE and users of the reports, as the organization seeks to understand the best ways to reach policy-makers and stakeholders with clearly synthesized and clearly presented health systems information.

#### Press releases

One of the ways that KCE's research reports are publicized is through press releases, which play an important role in the knowledge-brokering process. The resulting media coverage has provided good public visibility for KCE's activities. A number of factors likely contribute to the success of this informationpackaging mechanism for KCE. Press releases are written collaboratively by a dedicated KCE staff member with experience in science communication, the in-house experts and senior managers. They are produced in both Dutch and French and in a layman's style that is easy for journalists to understand and use.

#### Annual reports

Each spring KCE publishes an annual report in Dutch and French, containing short summaries of the research reports published during the past year, along with the documentation of organizational activities and finances typical of corporate annual reports. Although the annual reports are not formally a knowledgebrokering tool, they support knowledge brokering by fostering public debate in the media on health systems issues and by promoting KCE both as a resource for information and as an agency for addressing health policy research questions.

#### Website and electronic subscriptions

KCE's website has parallel Dutch and French pages (and less-detailed English pages) providing free access to electronic versions of all KCE reports. The website also contains information on past, current and upcoming projects; organizational structure; and methodological procedures. An important feature of the website is the ability of users to subscribe to e-mail alerts and RSS feeds to receive automated announcements about new reports and events from KCE. At the time of the research being conducted for this chapter, a review to update and improve the website was ongoing.

#### Interactive knowledge-sharing mechanisms

KCE involves stakeholders to develop and share health systems information, using a number of interactive mechanisms before, during and after research projects. Here we look at KCE's interactive mechanisms in four areas: (i) collaboration on the yearly research programme; (ii) consultation in preparing project proposals; (iii) expert meetings (in the course of research projects); and (iv) open seminars (skill-building for stakeholders, not tied to a specific project).

In addition to these interactions, KCE maintains regular contact - at least once every three months - with the main federal policy-makers, through board meetings (where policy-makers are represented) and meetings with ministers or senior civil servants. These contacts are not related to specific projects but serve to keep KCE and its stakeholders mutually informed about policy issues and research activities.

#### Collaboration on yearly research programme

Every year, KCE's yearly programme of work is developed collaboratively with its core audience of federal policy-makers (NIHDI, FPS and the ministers of health). Senior KCE managers meet with key representatives of policymaking institutions to seek input on their needs and priorities for research. Other stakeholder groups may also be proactively consulted. Meanwhile, KCE launches an annual call for preliminary proposals for policy-relevant research. The call is open to the general public: anyone with an interest in health care can propose topics for study.

A variety of formal and informal interactions throughout this process help to identify the policy relevance and priority of research questions proposed, and the feasibility of conducting a study to answer them, so that topics unlikely to make it into the work programme can be weeded out early, saving people the work of submitting a preliminary proposal. KCE staff assess the proposals received for fit within the organization's mandate, methodological feasibility and organizational resources (workload, budget and staff time). Based on this preparatory work, KCE's board of directors decides on the final yearly work programme.

A five-year assessment of this open approach to soliciting research topics showed that, although it is viewed as an asset, there was concern that topics submitted by the general public, patient organizations, professional groups and universities were less likely to be selected compared to those from government. Another issue identified was the ability of some stakeholders (including some of the core policy-makers) to prepare a successful proposal, a challenge that illustrates the importance of capacity building among all partners involved in knowledge brokering. Stakeholders have requested that KCE provide more

concrete feedback when their proposals are not selected so that they can better understand the scientific requirements and improve their applications.

#### Consultation in preparing project proposals

Interactive knowledge-sharing continues into the next phase of project development. After the board has determined the next year's work programme, KCE staff are expected to interact with stakeholders that submitted the proposals selected, as well as other agencies that would potentially be dealing with the issues at the heart of upcoming research. This allows KCE to gain insight into the question - what is at stake? - for the policy community in the issue to be studied. It also provides opportunities for researchers and policy-makers to fine-tune mutual expectations, and generally contributes to the usability of the final report. In practice, however, this informal process varies depending on the staff member responsible, as it comes on top of the regular project work of KCE staff and is not separately resourced in terms of staff time.

#### Expert meetings

KCE defines experts as people knowledgeable in a particular health-care domain. They can be scientists, public servants, policy-makers, and other stakeholders. Throughout the execution of research projects, KCE uses expert meetings to mobilize people with experienced-based knowledge to discuss the scope, research questions, methods and preliminary findings. The objective of expert meetings is to get a critical reflection on scientific soundness and policy relevance *during* the research process.

KCE aims to include at least three expert meetings, on average, for each project and has developed a database of approximately 1500 experts and their key competencies (for all of KCE's areas of work) who can be consulted. In some cases, lay people are also invited. In practice the number, timing and purpose of expert meetings will vary, and they can play very different roles depending on the project. For some projects the meetings are used to fine-tune the scope of the research; for others, expert meetings are mainly used to discuss technical research issues. For reports on health systems quality or performance, expert meetings have also been used to test the acceptability and policy relevance of proposed indicators.

#### Open seminars

KCE developed a series of interactive opportunities called open seminars to help build capacity for evidence-based health care and policy-making among its stakeholder community. Seminars were designed for small groups of external participants to learn about research methodology, aspects of the health-care system and other topics. The number of open seminars has declined dramatically over the years, mainly because of resource considerations, and they are now used primarily to disseminate and discuss content or methodological matters concerning individual reports.

#### Organizational model for knowledge brokering

KCE's organizational model was designed to help realize its mission as a research organization and as a knowledge broker for health policy-making, creating a unique agency in the Belgian health-care system. This section briefly describes some key features of that model: the organization's independence and transparency; the role of the board; and the multidisciplinary staff.

#### Independence and transparency

To guarantee freedom from political or stakeholder pressure, KCE was created as an independent public organization. Despite some initial opposition (some stakeholders had argued for research and knowledge-brokering units within existing agencies), this characteristic has proven to be one of the pillars of KCE's ability to ensure that a broad spectrum of perspectives and issues are put on the policy-making agenda in Belgium.

KCE's legal structure gives policy-makers and stakeholders an explicit governance role (described below) but with clear rules that protect the organization's independence in how health systems information is produced, packaged and shared. KCE also has clear rules about declaring conflicts of interest and strategies to address any conflicts that may arise. Conflict-of-interest rules apply to all levels of the organization, from board members to staff, and include subcontracted research teams and invited experts.

Full public transparency about the organization's activities is required, and information about all of KCE's detailed methodological procedures (such as how research topics are selected, how literature searches are conducted and stakeholders consulted) are publicly available on its website. These working procedures have proven to be an asset in building credibility for a relatively young organization and ensuring consistency and high quality in its work. At this stage, everyone involved seems to understand that the methodological procedures are meant to be a framework, not a straightjacket, and that a certain flexibility is necessary. A challenge over time may be to maintain a balance between realizing the mission of the organization, which requires a creative, problem-oriented approach, and the need for rigorous, transparent working procedures, which carries the risk of bureaucratization.

#### Role of the board

By law, KCE board members represent key stakeholders in health policy-making in Belgium. The board includes members appointed by the government

ministries and federal agencies responsible for health care and health insurance, as well as representatives from the national parliament, the hospital sector and various health-care professions. Embedding the contribution of different stakeholders in an institutional structure is fairly typical of Belgium's broader policy landscape, so KCE is not unique in this way.

In addition to strategic governance, KCE board members are actively involved in the organization's work. They regularly discuss the content of research reports at board meetings; they must endorse reports before they are published; and they are particularly involved in the development and approval of the executive summaries and recommendations. Board members also play a knowledge-brokering role in that they are expected to serve as a bridge between KCE and the organizations they represent. Similarly, the involvement of stakeholders on the board ensures that KCE research staff remain aware of the concerns and interests of policy-makers. Despite occasional tensions regarding recommendations or phrasing of executive summaries, the governance model has, on balance, proven its value.

#### Multidisciplinary staff

KCE's independent legal status allows the organization to use salary scales that facilitate the recruitment of highly qualified staff. From the start, the staff have included a mix of people with academic/research backgrounds and people with a professional background in public service, and that multidisciplinary makeup is reflected in each project team. Regardless of their individual backgrounds and roles in the organization, all staff are expected to develop competencies in networking with stakeholders, policy-makers, experts and scientists and in integrating these perspectives in their work. That said, one staff member is dedicated to developing a knowledge-management system in order to, for example, identify individuals nationally and internationally with expertise in particular topics and approach them with targeted requests for assistance.

# Case studies of intersections with policy-making processes

We present two case studies, both from KCE, illustrating how health systems information has intersected with the policy-making process. These are by no means the only examples of KCE supporting evidence-informed policy-making processes because every KCE project follows a similar approach and many have had significant policy impact. The first case study describes the process of responding to a question that was of immediate interest to policy-makers and stakeholders: whether to modify Belgium's long-standing maximum-billing system. The second illustrates a general approach to a health systems policy issue: how to measure health system performance. Each case study documents the

mixed use of information-packaging mechanisms and interactive knowledgesharing mechanisms and aspects of the organizational model for knowledge brokering, as well as their overall influence. A more fine-grained assessment than was possible in these brief case studies would be needed to answer questions such as whether some brokering-mechanisms are more influential than others and in which stage of the project interactive knowledge-sharing mechanisms are most influential - such stages might include preparing, setting the scope and selecting operational questions; conceptualizing key issues; selecting and discussing secondary evidence; deciding whether to use primary data collection or existing data; describing results and drawing conclusions; discussing the project's limitations; and formulating recommendations.

# Case study 1. Modifying the maximum-billing system

#### Background

Belgium has a tradition of combining social protection measures for insured citizens (in this case, by mandating, regulating and subsidizing health insurance) with measures to reduce moral hazard (in this case, by requiring them to pay some charges out of pocket). In 1963 a system of preferential tariffs was introduced which provided higher reimbursement levels to certain patients (orphaned children, pensioners, people with disabilities, widows/widowers). Co-payments increased considerably in November 1993, and the following year the government augmented the preferential tariff system with a ceiling on the total amount of out-of-pocket charges to be paid by specific groups. Eight years later, in 2002, this ceiling was effectively lowered through what came to be known as the maximum billing (MAB) system. As out-of-pocket charges continued to increase over the following years, the MAB ceiling was further lowered, resulting in ever-increasing global costs for the health insurance system. Policy-makers and stakeholders began to ask whether it would be possible to offer the same level of social protection at a lower cost to society. They asked KCE to undertake an evaluation of the effects of the MAB system on the use of health-care services (Schokkaert et al., 2008a, 2008b).

#### Knowledge brokering

The evaluation was undertaken with interactive knowledge-sharing built into each step of the process. Extensive interactions took place between KCE researchers and representatives of NIHDI and the sickness funds, particularly to discuss the scope of the problem to be addressed. Policy-makers, stakeholders and researchers agreed that the scope would be limited to questions about the effectiveness of the MAB as a social-protection mechanism, particularly in relation to impacts on the behaviour of patients and providers. This meant examining the impacts of the existing MAB (an ex-post approach) and predicting the likely impacts of change in MAB design (an ex-ante design). They also agreed that the scope would not include the more fundamental question about the desirability of the Belgian health insurance system becoming more selective or more universal, which was seen as a question of a philosophical or political nature that could not be answered by an empirical evaluation.

Interactions also took place about whether and how to combine data from two databases (one capturing health-care expenditures and the other documenting incomes) for a representative sample of the population. While approval to combine the data needed to come from senior decision-makers, methodological discussions also had to take place between KCE researchers and the more technical representatives of policy-making bodies and stakeholder groups.

The evaluation report pointed out the key strengths of the MAB system and made a number of recommendations about its organization; current inefficiencies of the MAB system; and administrative inconsistencies within the broader health insurance system. The report had a direct, immediate influence on the policy-making process in Belgium, particularly in relation to the MAB system. It formed the basis for the policy decision to maintain the MAB system with some technical changes, while causing policy-makers to reflect on the social protection of vulnerable groups. The report also had an indirect, long-term impact on requests by NIHDI and the sickness funds for research about the effectiveness of social protection mechanisms. Subsequent studies have looked at such issues as drug-reimbursement systems; lump-sum subsidies for chronic illness care; regulation of co-payments and co-insurance; and the operation of an additional safety net for extraordinary medical expenses: the Special Solidarity Fund.

# Case study 2. A first step towards measuring health system performance

#### Background

In contrast to several neighbouring countries, Belgium has no organized approach to health system performance measurement. In 2008, the Tallinn Charter committed Member States of the WHO European Region to be accountable for health system performance. The agreement created some political pressure to act, and KCE was asked by several federal government ministries to guide a conceptual and methodological reflection on creating a performance measurement system for the Belgian health system. KCE was particularly well placed to do so because in its early years the organization had prepared an inventory of existing data-registration systems. This inventory could be used as a stepping stone towards performance indicators (Vlayen et al., 2011).

#### Knowledge brokering

As with the evaluation of the MAB system, this exploratory research was undertaken with interactive knowledge-sharing built into each step of the process. KCE researchers shared conceptual and methodological insights drawn from the research literature and an analysis of existing performance measurement systems (both within Belgium and internationally); and policymakers and stakeholders shared their tacit knowledge, views and experiences through a variety of face-to-face meetings, as well as through surveys.

The goal of KCE researchers was to develop a robust conceptual framework within which dimensions of performance and related indicators could be identified for both health systems and the determinants of health. Their work was informed by a survey of the potential users of a performance measurement system, which included politicians and civil servants from the federal and regional levels and representatives from the sickness funds, nongovernmental associations, health professional associations, and scientific institutions. While the survey had methodological limitations, it yielded important information and initiated the process of reflection by policy-makers and stakeholders. Periodic discussions with an advisory group also helped to inform the research (similar to KCE expert meetings described above, but on a much larger scale.) These discussions were also designed to build commitment among stakeholders to the idea of a performance measurement system and proved very useful in identifying commonalities and divergences in people's visions of such a system. The advisory group meetings covered a wide territory of questions: who would use the performance measurement system and to pursue which goals (e.g. internal accountability, external description, international comparison)? What principles should it follow (e.g. should it assess the health system broadly or, more narrowly, the health-care system? Should it focus on particular dimensions, such as efficiency and equity, or be more integrative? What specific indicators should comprise it?

Having settled on a performance assessment model that would include health care as well as the broader determinants of health, KCE researchers solicited input from the advisory group on a long list of 47 primary and eight secondary performance indicators, which was eventually reduced to 18 primary and five secondary performance indicators covering the dimensions of accessibility, appropriateness and safety, effectiveness, efficiency, continuity and sustainability. A patient-centredness dimension had also been identified but no indicators were selected for it. KCE researchers then piloted these indicators, developed through a combined scientific and participatory process, to identify gaps and issues with reliability and validity in the health systems information currently available in Belgium.

The main achievement of the reflection process and the resulting report (prepared and publicized using KCE's customary information-packaging mechanisms) was that they focused the attention of many health system policymakers and stakeholders (at least for a while) on the need to develop and use a performance measurement system. Some health authorities and organizations made a commitment to undertake a range of activities (from passive to active) related to performance measurement, including dissemination of the report, internal discussion, identification of research priorities and formulation of policy recommendations. At this stage, however, it is unclear to what extent health system performance measurement will be taken up seriously on the health policy agenda overall, although it does appear that further actions will be taken and that KCE's report will be used as important input to those actions.

#### Lessons learned

# Having a clear mandate for both research and knowledge brokering

KCE's explicit mandate to conduct both research and knowledge brokering (combined with resources devoted to each) make it a unique organization in Belgium, well-positioned to provide leadership in supporting evidenceinformed healthy policy. KCE's mandate and model demonstrate some of the key features for knowledge-brokering organizations highlighted in the BRIDGE criteria. However, in putting a dual mandate into practice, an organization will confront questions about how to set priorities for the allocation of resources to research and knowledge brokering. Scientists can find it difficult to develop the knowledge and skills needed to be an effective knowledge broker and to execute a knowledge-brokering role while also working to attain high standards and productivity in their research. While all scientific staff are currently expected to engage in knowledge brokering, KCE has learned that a good researcher does not necessarily have what is needed to be a good knowledge broker, particularly the knowledge of the policy context and the interpersonal skills necessary to participate in interactions with policy-makers and stakeholders before, during and after writing a report. Concrete changes to how the organization functions had not yet been made during the period covered by this chapter.

# Recognizing that knowledge brokering requires a change in culture, not just structure

The creation of the KCE as an organization independent of existing government and stakeholder organizations (e.g. ministries and sickness funds) launched a new type of player in the field – an organization with the space to think creatively about how to support evidence-informed policy-making through rigorous research and knowledge brokering. As a result, KCE attracted young, highly committed, well-trained staff interested in developing new ways of doing things. Many have come to recognize that knowledge brokering is not solely an issue of organizational structure but also an issue of professional and organizational culture. They acknowledge the need for a continued willingness to reflect on the organization's identity; to learn about how to balance scientific rigour and practical relevance; and to adapt (as individuals and as an organization) as the policy context evolves – and they see these challenges as being not only resource intensive but also key to KCE's future.

# Developing and maintaining legitimacy

Several of the people interviewed identified the critical need for a knowledgebrokering organization to develop and maintain legitimacy in its national policy context. For KCE, legitimacy has meant the ability to build and continue a reputation for timely, relevant work that challenges policy-makers and stakeholders constructively with the best available health systems information.

In its short history KCE has set the standard in Belgium for the use of evidence to build health systems information and for collaborating closely with policymakers and stakeholders while always maintaining its independence. In a domain with little competition, the organization was able to settle in as a niche player and has been lauded for its scientific rigour; systematic and transparent procedures; and highly qualified, multidisciplinary staff. The organization is now being asked to demonstrate and, through knowledge brokering, enhance the health impacts of the resources it spends on research. A few interviewees warned that KCE's reputation could be at risk under these pressures, particularly in the domain of health systems information where the methodologies available and the evidence needed to demonstrate impact are less clear cut and the issues are more likely to be political in nature, compared to KCE's other domains of work such as clinical practices guidelines or health technology assessment. The major critique of KCE currently is that the organization primarily supports the political agenda of ministers in health care, whereas a much broader pool of policy-makers and stakeholders would also like to be supported.

Being timely and relevant presents a particular set of challenges. While KCE does typically respond to questions quickly, policy-makers' timelines are sometimes too short to allow high-quality research. In addition, reports may be delayed for justifiable methodological reasons (or, less justifiably, for planning reasons), although there have been cases of policy-makers being willing to wait for a KCE report before making a decision with major budgetary impact. As for relevance, an impact assessment of KCE's first five years of operation found that its reports in the area of health systems information were judged somewhat less positively in terms of the feasibility and usefulness of their recommendations

compared to projects in other areas. This finding may be attributable to fundamental differences between these domains, such as differences in the scope of the research questions being asked (specific versus broad) and in the nature of the findings generated (practical and immediately applicable versus more conceptual and reflexive) - differences that most policy-makers and stakeholders recognize and accept.

# Using a mix of knowledge-brokering mechanisms

KCE has come to appreciate the benefits of using a mix of informationpackaging mechanisms and interactive knowledge-sharing mechanisms within an organizational model for knowledge brokering that supports the development of trust among policy-makers, stakeholders and researchers. Common to all mechanisms is an effort to address topical, relevant issues from the perspective of policy-makers and stakeholders and to target the full range of audiences likely to be involved in, or affected by, decision-making on the issue. One key benefit is the sense that emerges of co-ownership of the work, which one policymaker interviewed cited as important to ensure that reports will have impact. Although co-ownership brings with it the additional challenge that a small number of policy-makers and stakeholders may seek to influence the outcome to better suit their interests, it is a valuable (though resource-intensive) element of knowledge-brokering. Co-ownership requires that all parties have had the opportunity to learn about one another's views and experiences, and that these perspectives are integrated into the work.

# Balancing a project orientation with more general knowledge support

KCE has primarily a project orientation – a focus on decision support on mutually agreed, specific questions. This has led some policy-makers and stakeholders to push for a complementary cross-cutting orientation - what might be termed knowledge support on broader and more ad hoc questions (one interviewee called it "a helicopter view"). At present KCE does not have a systematic approach to integrating knowledge across report topics or to respond to questions in areas where it has not produced a report. Instead, it relies on the personal views of individual KCE experts to answer cross-cutting questions. Some policy-makers, stakeholders and researchers have suggested that KCE consider developing communities of practice in defined areas of health systems information as one possible response to this need.

#### **Conclusions**

Experience with knowledge brokering in Belgium suggests that it is possible to feed the process of collaborative policy-making in ways that develop trust and support co-ownership of the work while retaining the organization's independence. KCE's dual mandate for research and knowledge brokering, and the mix of knowledge-brokering mechanisms it uses, are key factors in this process and illustrate the value of a number of the BRIDGE criteria. However, KCE remains a young, still-developing organization which has shown itself able to continue to learn from its experiences; adapt to rapidly changing policy contexts; and respond to new developments in the fields of generating evidence and supporting evidence-informed policy-making.

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