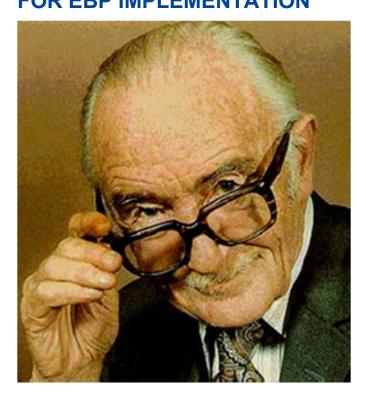


# TOWARDS AN INTEGRATED EVIDENCE-BASED PRACTICE PLAN IN BELGIUM PART 3 – PROFESSIONAL LEADERSHIP AND CHANGE MANAGEMENT AS A CATALYST FOR EBP IMPLEMENTATION





2018 www.kce.fgov.be



KCE REPORT 291
HEALTH SERVICES RESEARCH



### TOWARDS AN INTEGRATED EVIDENCE-BASED PRACTICE PLAN IN BELGIUM

PART 3 - PROFESSIONAL LEADERSHIP AND CHANGE MANAGEMENT AS A CATALYST FOR EBP IMPLEMENTATION

SOFIE ROGIEST, BEN KOKKELER, KOEN MARICHAL, IVETTE OOMENS, MARIJKE EYSSEN



Title: Towards

Towards an integrated evidence-based practice plan in Belgium – Part 3: Professional leadership and change management as a catalyst for EBP Implementation

Authors:

Sofie Rogiest (Antwerp Management School), Ben Kokkeler (Technopolis Group), Koen Marichal (Antwerp Management School), Ivette Oomens (Technopolis Group), Marijke Eyssen (KCE)

Project coordinator:

Marijke Eyssen (KCE)

Reviewers:

Frank Buntinx (KU Leuven), Paul Gemmel (UGent), Pascale Jonckheer (KCE)

External experts / stakeholders:

Bert Aertgeerts (KULeuven), Leen Bouckaert (Vlaams Ergotherapeutenverbond (Vergo) vzw), Sam Cordyn (CIPIQ-S), Alfons De Schutter (WVVK), Benjamin Fauquert (EBMPracticeNet), Siegfried Geens (CDLH), Didier Martens (Farmaka), Roy Remmen (Minerva), Thierry Van der Schueren (SSMG), Thérèse Van Durme (UCL), Patrick Van Krunkelsven (CEBAM), Mieke Vermandere (EBMPracticeNet)

Steering group:

Filip Ameye (RIZIV – INAMI), Marc Bossens (RIZIV – INAMI), Carl Cauwenbergh (RIZIV – INAMI), Annelies Cools (Kabinet Minister Sociale zaken en Volksgezondheid), Kurt Doms (FOD Volksgezondheid – SPF Santé publique), Erik Everaert (FAGG – AFMPS), Machteld Gheysen (FOD Volksgezondheid – SPF Santé publique), Margareta Haelterman (FOD Volksgezondheid – SPF Santé publique), Pascal Meeus (INAMI – RIZIV), Mieke Walraevens (Kabinet Minister Sociale zaken en Volksgezondheid), Nabila Yahiou (SPF Santé publique – FOD Volksgezondheid)

Reported interests:

'All experts and stakeholders consulted within this report were selected because of their involvement in the topic of this study "EBP Plan". Therefore, by definition, each of them might have a certain degree of conflict of interest to the main topic of this report'

Membership of a stakeholder group on which the results of this report could have an impact: Bert Aertgeerts (President CEBAM, president CDLH), Sam Cordyn (CIPIQ-S), Alfons De Schutter (PQK asbl, workgroup ELR), Benjamin Fauquert (EBMPracticeNet asbl, CDLH asbl), Roy Remmen (MINERVA), Thierry Van der Schueren (SSMG), Patrick Vankrunkelsven (CEBAM), Mieke Vermandere (EBMPracticeNet asbl, KU Leuven)

Fees or other compensation for writing a publication or participating in its development: Benjamin Fauquert (CDLH), Roy Remmen (KCE reports about dissemination (KCE 212)), Thierry Van der Schueren (fee for the realization of scientific work in the context of prevention (funds Walloon region))

Participation in scientific or experimental research as an initiator, principal investigator or researcher: Thérèse Van Durme (Project Gudelmans 'd' 2009-2010)

A grant, fees or funds for a member of staff or another form of compensation for the execution of research described above: Roy Remmen



Consultancy or employment for a company, an association or an organisation that may gain or lose financially due to the results of this report: Bert Aertgeerts (inspirer EBMPracticeNet, no financial impact), Didier Martens (employee asbl Farmaka), Roy Remmen (MINERVA), Mieke Vermandere (EBMPracticeNet asbl)

Payments to speak, training remuneration, subsidised travel or payment for participation at a conference: Thierry Van der Schueren (congress paid by SSMG)

Presidency or accountable function within an institution, association, department or other entity on which the results of this report could have an impact: Bert Aertgeerts (CEBAM, CDLH, Health and science), Benjamin Fauquert (President EBMPracticeNet), Siegfried Geens (Coordinator CDLH asbl), Didier Martens (employee asbl Farmaka), Roy Remmen (MINERVA), Thierry Van der Schueren (general secretary SSMG), Mieke Vermandere (Coordinator EBMPracticeNet)

Layout: Ine Verhulst

#### Disclaimer:

- The external experts/stakeholders were consulted about a (preliminary) version of the scientific report. Their comments were discussed during meetings. They did not co-author the scientific report and did not necessarily agree with its content.
- Finally, this report has been approved by common assent by the Executive Board.
- Only the KCE is responsible for errors or omissions that could persist. The policy recommendations
  are also under the full responsibility of the KCE.

Publication date: 06 February 2018

Domain: Health Services Research (HSR)

MeSH: Evidence-Based Practice -- Delivery of Health Care -- Quality Assurance, Health Care -- Practice Guidelines --

Information Dissemination

NLM Classification: WB 102.5 (evidence-based practice)

Language: English

Format: Adobe® PDF™ (A4)
Legal depot: D/2018/10.273/14

ISSN: 2466-6459

Copyright: KCE reports are published under a "by/nc/nd" Creative Commons Licence

http://kce.fgov.be/content/about-copyrights-for-kce-publications.





How to refer to this document?

Rogiest S, Kokkeler B, Marichal K, Oomens I, Eyssen M. Towards an integrated evidence-based practice plan in Belgium – Part 3: Professional leadership and change management as a catalyst for EBP Implementation. Health Services Research (HSR). Brussels: Belgian Health Care Knowledge Centre (KCE). 2018. KCE Reports 291. D/2018/10.273/14.

This document is available on the website of the Belgian Health Care Knowledge Centre.



### **■ TABLE OF CONTENTS**

LIST OF	FIGURES	2
	TABLES	
LIST OF	ABBREVIATIONS	3
	SUMMARY	4
	SCIENTIFIC REPORT	
1	INTRODUCTION	
2	THE ROLE OF LEADERSHIP AND CHANGE IN EBP IMPLEMENTATION	11
2.1	LEADERSHIP IN NETWORKS IS DIFFERENT FROM LEADERSHIP IN HIERARCHIES	1
2.2	KEY ELEMENTS FOR LEADERSHIP AND DEVELOPMENT IN NETWORKS	14
2.3	SENSE BREAKING, SENSE GIVING & SENSE MAKING PROCESS IN LEADERSHIP TRANSFORMATION	
2.4	HARD CHANGE	16
2.5	SOFT CHANGE	
2.6	COMPLEXITY CHANGE	18
2.7	CHANGE IN THE CONTEXT OF THE EBP PROGRAMME	
3	CHANGE READINESS OF PROFESSIONALS IN PRIMARY CARE	20
4	THE ROLE OF EXPERT NETWORKS IN EBP IMPLEMENTATION	2
4.1	STRUCTURING CONTINUOUS CHANGE: EXPERT NETWORKS	2
4.2	CHANGE IN THE ERA OF DIGITALISATION	22
5 •	DESIGN PRINCIPLES FOR THE OPERATIONAL EBP IMPLEMENTATION PLANREFERENCES	



LIST OF FIGURES	Figure 1 – Key themes in the development of the EBP Plan		
	Figure 2 – The process model of identification		
	Figure 3 – The Eight Accelerators (Kotter, 2012 <sup>49</sup> )	24	
LIST OF TABLES	Table 1 – Differences between leadership as hierarchy and leadership as collaboration	4.6	



# LIST OF ABBREVIATIONS

ABBREVIATION	DEFINITION	
EBP	Evidence-Based Practice	
NAO	Network Administrative Organisation	
NICE	National Institute for Health and Care Excellence	
SIGN	Scottish Intercollegiate Guidelines Network	
S1	Synthesis in French and Dutch on the governance structure for the EBP Programme	
S2	Synthesis in French and Dutch on implementation and performance management of EBP in primary care in Belgium	
SB	Scientific Background chapter of this report	
FOD – SPF	Federale Overheidsdienst – Service Public Fédéral/ Federal Public Service	
FAGG – AFMPS	Federaal Agentschap voor Geneesmiddelen en Gezondheidsproducten – Agence Fédérale des Médicaments et des Produits de Santé/ Federal Agency for Medicines and Health Products	
RIZIV – INAMI	Rijksinstituut voor ziekte- en invaliditeitsverzekering – Institut national d'assurance maladie-invalidité – National institute for health and disability insurance	



### SUMMARY

This report was written in a context of the development of a national Plan for Evidence Based Practice (EBP) in Belgium. This EBP Plan should allow to install an EBP Programme, and should strengthen the efficiency and quality of care by steering and coordinating EBP related activities in Belgium at the federal level. This document is the third of a set of five chapters that served as scientific background for the development of the EBP Plan. It is related to change management and leadership.

#### The role of leadership and change in the EBP Programme

- We distinguish largely two kinds of leadership systems or approaches: hierarchical and networked
- Typical elements of hierarchies are a top down "command and control" idea about leadership.
  - The upside of hierarchy is efficiency. These systems thrive when work can be standardized and the environment is stable and controllable.
  - o The downside is poor engagement from the contributors, poor collective decision making, poor flexibility, poor collaboration.
- Networked leadership is less stable: power gets delegated in a dynamic way.
  - It is more diffused as a 'heterarchy' with power shifting over time due to resources and situational needs.
  - The downside of this more horizontal leadership is lack of transparency, control and speed of decision making.

#### Key elements in leadership and development in networks

- A distinction can be made in coordinative and cooperative networks.
  - In "coordinative" networks people integrate the delivery of individual services into a coordinative effort
  - Collaborative networks involve sharing of expertise and information and are most appropriate when systems change or innovation is needed as with the EBP Programme.
- Network development and management is specific leadership work, in which four tasks can be distinguished: activation, framing, mobilizing and synthesizing.
- Network leading is not about commanding and controlling, but more about installing a safe environment in which leadership can be distributed, decisions can be made in a participatory way, differences are respected and shared value comes first.

### Sense breaking, sense giving & sense making process in leadership transformation

- Implementing the EBP Programme is also implementing a new mindset about health care and professionalism
  - Changing a mind-set is identity work: professionals need to adapt their current belief system.
- Implementing EBP is likely to initiate an identity threat: it affects the way
  the autonomous professional is used to work and predicts resistance to
  change
  - Identity threats or, in other words, dealing with the negative consequences of EBP for the self-image of professionals calls for identity work.
- To increase the adoption of the right mind-set about EBP, sense breaking and sense giving is necessary in governance
  - Sense breaking is about making clear that change is needed.

- Sense giving is about supporting, helping, recognizing, trusting and empowering.
- Sense making is the combination of sense giving and sense breaking.
   This allows individuals to reconstruct their identity narrative.

### Hard change, soft change & complexity change

- The choice of change strategy will depend on the issue at hand.
  - Hard problems are clearly delineated, with different stakeholders sharing the same view on the problem.
  - Soft problems are less clearly defined, more contentious issues. There is no agreement on the problem or on the required changes, and there is a high level of emotional involvement.
- Hard change is an approach to system change which can be best applied in the context of hard problems. Clear, rational change objectives are identified, in order to identify the optimal way of achieving them. Planning and control are essential aspects, the approach is topdown.
- Soft change emphasizes not only the content and control of the change, but also the process by which change comes about. Soft change departs from a participative logic. The process is planned but can change down the road; it is top-down led, but takes into account bottomup input and feedback.
- Next to hard and soft problems, organizations may deal with wicked problems: dynamic, interconnected issues that influence and are influenced by complex systems in which different institutions are important actors. For wicked problems complexity change is the best strategy: it does not subscribe a clear change process but instead proposes leverage points for change. Complexity change is a decentralised process that cannot be managed top down. The initiation and ownership of the change is spread throughout the system. The leadership model is shared leadership, which means that leadership is the property of the group, leadership is a process where group



members collectively cooperate and make decisions. Complexity change and shared leadership require a certain degree of maturity since one cannot be obliged to take up responsibility and needs to understand why this is important.

#### Change in the context of the EBP Programme

In the context of the EBP Programme, the set-up of the governance structure as described in the first Synthesis, i.e. the transition from the current situation to the new organisational framework, is an issue that can be solved by hard change management, including definition of quantitative objectives, a planning of appropriate strategies, evaluation of outcomes, and all this in a top-down approach.

Implementation of guidelines or other EBP products is mainly a soft change issue, especially during the starting phase of actions aiming to improve EBP implementation in Belgium. This first phase is the most sensitive because primary care professionals must be convinced to use EBP more frequently. At this stage, a top-down approach that takes into account bottom-up input and feedback seems most appropriate. Once the programme will be launched and stabilised, central steering should be less prominent and it should let shared leadership fully play its role in EBP implementation in the health care sector.

#### Change readiness of professionals in primary care

- Change readiness is an individual's "beliefs, attitudes, and intentions regarding the extent to which changes are needed and the system's capacity to successfully undertake those changes".<sup>42</sup>
- It has five dimensions<sup>43</sup>:
  - change confidence (do I have the skills necessary to execute the tasks and activities that are associated with the change);
  - need for change (do I feel that there are legitimate reasons for change);
  - personal benefits of change (do I feel that I will benefit from the change);

- societal benefits of change (do I feel the society will benefit from the change);
- political support (do I feel that the societal leadership and management are committed to the change)
- Change readiness of health care professionals is a crucial factor of implementing EBP.
- The conclusive observations on change readiness among the specific groups of professionals in primary care in Belgium can be found in detail in chapter 3.3 in SB1, structured for six professional disciplines.

#### The role of expert networks in EBP implementation

- Expert networks might be a means to introduce EBP implementation and stimulate continuous change of behaviour among primary health care professionals.
- These networks are informal, on a voluntary basis. They can be temporary or more permanent. In these (multidisciplinary) networks, a group of primary health care professionals exchanges knowledge and experiences around one or a few thematic areas of their interest.
- The EBP Programme will build on the infrastructure that the Belgium Government plans to realize: an encompassing digital health structure, where the citizen owns his or her health data (eHealth). It will also build on a platform to centralise dissemination of guidelines and other EBP products (EBMPracticeNet), to give professionals broad access (24/7 anywhere) to trusted information.
- In view of broader societal developments in the use of social media, the EBP Programme should also take social media on board. These could have an important contribution to the awareness of health care professionals as well as patients about EBP, and they could support the building of local expert networks.



## Design principles of the introduction of a national EBP Programme, and implementation of EBP practices by primary care professionals

• The final goal of the introduction of the national EBP Programme is to improve the use of EBP guidelines and other EBP products by primary care professionals. Kotter <sup>51</sup> offers a comprehensive framework to install system change (see Figure 3), taking into account a structure that combines a hierarchical organization to manage the efficiency and effectiveness at large aiming at all professionals in primary care, combined with an expert network of primary health care professionals.

Some important principles of this framework are: many change agents, not the usual few appointees; much more leadership, not just more management; two systems (hierarchical structure and expert network), but one organization.

- Kotter's framework includes eight components:
  - Create a sense of urgency
  - o Build and maintain a guiding coalition
  - Formulate a general vision and develop change initiatives
  - Communicate the vision and the strategy to create buy-in and attract a growing (volunteer) expert network
  - Accelerate movement toward the vision and the opportunity by ensuring that the network removes barriers
  - Celebrate visible, significant short-term wins
  - Never let up. Keep learning from experience. Don't declare victory too soon
  - Institutionalize strategic changes in the way of thinking and working.



### SCIENTIFIC REPORT

### INTRODUCTION

#### About this document

In June 2016, the Minister of Social Affairs and Public Health wrote a conceptual note regarding the need to strengthen the Evidence Based Practice (EBP) policy in Belgium. At the same time, the Minister commissioned KCE to provide the scientific background necessary to develop an EBP Plan for Belgium. This EBP Plan should allow to install an EBP Programme, and should strengthen the efficiency and quality of care by steering and coordinating EBP related activities in Belgium at the federal level. In a first time, it should address primary health care professionals. After evaluation, extension to secondary care will be considered.

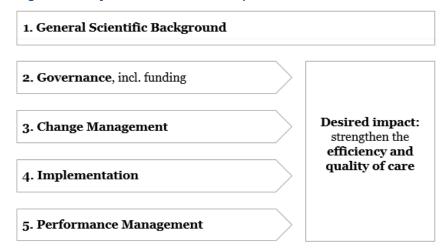
Two Syntheses available in French and Dutch summarize the EBP Plan developed by KCE. The first Synthesis deals with the overall aim of the national EBP Programme, and with its governance structure. It was developed in close collaboration with the Steering Group appointed by the Minister, and composed by representatives of RIZIV/INAMI, FOD Volksgezondheid – SPF Santé publique, FAGG – AFMPS, KCE, Cabinet of the Minister of Social Affairs and Public Health). A second Synthesis deals with issues on change management, implementation, and performance management. We use S1 to refer to the first Synthesis, and S2 to refer to the second Synthesis.

This document is the third of a set of five chapters that served as scientific background for the development of the EBP Plan. The first of these chapters provides a general scientific background while the second chapter focuses on the governance structure of the EBP Programme. The third scientific background chapter is related to change management and leadership, and the fourth chapter aims to discuss EBP implementation issues in primary health care. The fifth chapter is dedicated to performance management of EBP implementation in primary health care in Belgium. An overview is visualised in Figure 1.

When we refer to one of these chapters, we use the abbreviation SB with the number associated to the chapter. E.g. the third scientific background chapter related to change management is referred to as SB3.

×

Figure 1 – Key themes in the development of the EBP Plan



#### Aim of the third chapter

To enable the EBP Programme to become successful in the long run, it should stimulate behavioural change of professionals in primary health care in Belgium to keep an open mind to EBP practices and guidelines application. The aim of this chapter is to highlight some general principles and concepts that can be useful to support these change processes.

Therefore, the focus in this chapter is conceptually on leadership (see 2.1-2.2) and change (see 2.3-2.7; see 3 and 4) in conjunction with expert network learning concepts. A selected and coherent set of concepts is presented that fit in a change approach where professional leadership is core, soft change and sense making are predominant, and where learning in thematic (temporary) networks that are initiated and owned by professionals is stimulated.

This chapter on professional leadership and change differs. From the consolidated body of scientific literature on leadership and change in professional organisations, we present here relevant concepts on leadership in hard, soft and complexity change approaches. But still, translating these concepts as part of further detailing of the National EBP Programme in the upcoming years, needs careful balancing while taking the specific context in Belgium into account. The studies that have been conducted by KCE in previous years are helpful, in particular the conclusive observations on change readiness among professionals in primary care in Belgium<sup>a</sup>. Further, in order to strengthen the core conceptual frame of leadership and change in the EBP Programme, we embark on concepts of expert learning networks. Here we invite the reader to read carefully: the concepts that are presented here are based on theoretically and empirically based scientific publications, but still: we are facing a relatively young area regarding its application in health care. It also concerns an area in which a lot of new ICT applications for knowledge sharing and related current developments are to be taken into account.

Interestingly, including concepts as presented here on learning in expert networks combined with concepts on leadership and change, in a global picture for the National EBP Programme, suits the overall mission and nature of the Programme: it is an innovation journey with well-organized network governance and monitoring that, within a clear set scope and strategy, allows for network learning and leadership.

In conceptual terms this chapter is of a different nature compared to the other chapters, though being a crucial part of the overall structure of the National EBP Programme. In the other chapters, a more or less consolidated scientific understanding could be brought to the fore. In SB5 this could illustratively be supported by some selected foreign examples that are internationally perceived as good practices (SIGN in Scotland and NICE in England).

Among health professionals that did not use guidelines, 78% is willing to use guidelines in the future. See KCE report 284



Change of behaviour is an ongoing challenge for the professionals concerned, and also for the NAO (Network administrative organisation) who has to support the learning in networks as well as the consolidation of lessons learned. It is a dynamic process that requires a dynamic leadership and learning structure. Thus, conceptually, a pool of leaders of change (e.g. early adopters see section 3.2.4.2 in SB1, or opinion leaders) will be introduced in this chapter as the gate keepers of a dynamic landscape of learning networks of professionals, here titled as 'expert networks'.

Technology is one of the factors that practically enable, support and stimulate learning and change: it enables and stimulates health professionals to share and to learn in a quite practical way as part of their daily work that suits their personal learning style. It informs them and their colleagues in a (temporary) thematic expert network to reflect and learn, it allows and informs change leaders to act and where necessary intervene, it allows the change leaders in collaboration with the NAO to consolidate lessons learned and disseminate these to other expert networks in the EBP Programme. In this perspective of change and learning, technology in its enabling and bridging function may also reach out to patients and patient organisations.

#### Methods

The methods for SB1 are stipulated in the document. The draft of this chapter was discussed with the federal Steering Group in a dedicated meeting on March  $9^{th}$  2017.

The point of departure for SB2, SB3, and SB5 was the science based knowledge in the field of leadership & change theory, network governance theory, organizational learning theory, and evaluation theory brought to the fore by the Technopolis Group<sup>b</sup> in collaboration with experts from the Antwerp Management School<sup>c</sup>. This was combined with their extensive practice based experience in governance, change management and evaluation of health care. For SB4, an existing systematic review served as

a basis, updated with a limited literature search and grey literature, as stipulated in the document.

For each theme (Governance, Change and leadership, Implementation and Performance Management), intensive discussions and exchange of views took place, in order to settle on a basic draft for the chapter, relying on theory and practice, taking also into account the scientific information on EBP compiled in SB1.

In parallel, a consultative cycle commenced. Each cycle comprised the following steps:

- a thematic workshop with the KCE team and the federal Steering Group (April 6<sup>th</sup> 2017: Governance; May 8<sup>th</sup> 2017: Implementation and Performance management; May 9<sup>th</sup> 2017: Change and leadership);
- a consultative expert meeting with experts involved in development, validation and dissemination of EBP guidelines in Belgium (May 3<sup>th</sup> 2017: Governance; June 23<sup>th</sup> 2017: Change and leadership, Implementation and Performance management);
- a conclusive meeting with the federal Steering Group (June 8<sup>th</sup> 2017: Governance; October 25<sup>th</sup> 2017: Change and leadership, Implementation and Performance management).

Each thematic workshop comprised two to three presentations by experts from the Technopolis Group and the Antwerp Management School, followed by a discussion, in order to stimulate a balanced appraisal of the different views. Each meeting resulted in a common understanding of the theme.

Similarly to the thematic meetings, the consultative expert meetings were aimed to inform the experts about state of the art insights in relevant thematic areas. It started from two to three presentations and was followed by a discussion. About 15 experts participated in each of the meetings (see colophon). The results from these expert consultations were processed in the second draft of each of the chapters. Subsequently, in view of their

b http://www.technopolis-group.com/

c https://www.antwerpmanagementschool.be/



extensive experience with EBP, the experts were invited to give written feedback on the second draft of the chapters.

In the next phase, the federal Steering Group concluded the final drafts of the chapters after discussion in a dedicated meeting.

## Some key notions on the governance structure of the EBP Programme as proposed in this report.

For the governance structure during the initial transition phase, see S1 and SB2. At the final stage, six interconnected "phases" making up the so-called EBP Life cycle are recognised: prioritization, development, validation, dissemination, implementation, and evaluation. The scientific procedures related to each of these phases are under the responsibility of a cell or platform, which coordinates the scientific activities of the organizations participating in this phase. The overall programme and process management related to all of the 6 phases is under the responsibility of an independent administrative organization (NAO, Network administrative organisation). The NAO takes up the tactical and operational management of the EBP Programme. The Steering Group (RIZIV/INAMI, FOD Volksgezondheid - SPF Santé publique, FAGG - AFMPS, KCE, Cabinet of the Minister of Social Affairs and Public Health) is responsible for and has the power to strategically steer and finance the EBP Programme. The end users of the EBP products, primary health care professionals as well as patients, their relatives or patient representatives, can give feedback through the EBP Advisory Committee. More details can be found in S1 and SB2.

# 2 THE ROLE OF LEADERSHIP AND CHANGE IN EBP IMPLEMENTATION

# 2.1 Leadership in networks is different from leadership in hierarchies

The question of leadership is how to come to collective action. How can people be motivated to work in an aligned way and supporting a larger idea?. This is a question of form and of behaviour. The form is about the "what of leadership", the definition of roles and responsibilities in leadership. The behaviour is the "how of leadership", the skills, knowledge and attitude that leaders need in their role. Both are defined by the "why of leadership": what is the agenda? What needs to be accomplished?

We distinguish largely two kinds of leadership systems or approaches: hierarchical or vertical leadership, and networked or horizontal leadership. The hierarchy is "a rank ordering of individuals along one or more socially important dimensions... typically power, status, leadership... formal or informal".²(p. 47) Some group members get more status, power, benefits and in return "lead" the group by giving direction, protection and coordination.³ While hierarchical leadership is vertical leadership based on rank of individuals, networked leadership is horizontal where a system is created of teams with representatives from all divisions and all levels without hierarchical authority of one team over another. Networked leadership is adapted to organisation in an highly evolving environment.

Typical elements of hierarchies are a top down "command and control" idea about leadership. There can only be one leader at the top. Leadership is mostly understood as a formal position of power. The person with more power is the leader. The agenda is set at the top and the rest of the organization is expected to follow. Common leadership behaviours are directive ("I tell you what to do") and transactional ("I give you reward for your efforts"). Leaders in the middle implement strategy. Typical positions are "manager", "head of department", "project leader". Teamwork is difficult as hierarchies provoke a competitive, tournament idea of collaboration: "up or out" in the most extreme form. Employees are expected to do what is

S

expected. Whistle blowers get in trouble. Conflicts or open debates are difficult. Leadership development is limited to the leaders with power. It's exclusive.

The upside of hierarchy is efficiency and they thrive when work can be standardized and the environment is stable and controllable. The downside is poor engagement from the contributors, poor collective decision making, poor flexibility, poor collaboration. Centralized power also tends to get corrupted and self-interested. It needs balancing to stay healthy for the group.<sup>2</sup> Head and Alford <sup>5</sup> for instance state that traditional hierarchical forms of public administration are not conducive to grapple with wicked problems.

Because of these downsides, a lot of steep hierarchies are in trouble today. Society is evolving fast, driven by technological, demographical and geopolitical changes <sup>6</sup>. This evolution pushes organizations to innovate and adapt and this needs networks and more shared, horizontal leadership (Table 1). The why of "shared leadership" is value creation, innovation, transformation, community building. The what is different. Shared leadership is less stable: power gets delegated in a dynamic way <sup>8</sup>, it is more diffused as a 'heterarchy' with power shifting over time due to resources, situational needs… <sup>9</sup>. Leadership is less positional and stable, but invested in temporary roles, informal, emergent. Leadership is more a group dynamic and personal initiative. Self and shared leadership are "the new silver bullets in leadership" <sup>10</sup>. The how of leadership is also different. It is about working with people, creating trust and thus leaders with a more transformational or empowering style are needed <sup>11</sup>.

The downside of this more horizontal leadership is lack of transparency, control and speed. It is also counter-intuitive. As Charles Darwin already observed: "as we see those animals, whose instinct compels them to live in society and obey a chief, are most capable of improvement, so is it with ... mankind. (p. 56)" <sup>12</sup>. Leadership development is therefore of crucial importance, more specifically coaching of group practices and change.

The important message of this more fundamental approach towards leadership is twofold. First of all, vertical leadership in hierarchies is different in why, what and how compared to horizontal leadership in networks. Hierarchical leadership has its limits in creating collective action. Networks become a new paradigm. Secondly, shared leadership is new in management theory. Leadership science has only begun to define leadership in a more collective way, including bottom up and shared leadership. It needs attention in terms of form (language, roles), development (mind-set, practices) and even research, as it is per definition contextual <sup>13</sup>.

We use the term 'shared' as common denominator for several leadership theories that emphasize the horizontal dimension in leadership: leadership as "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both. <sup>7</sup>, p. 1



Table 1 – Differences between leadership as hierarchy and leadership as collaboration

	Integrated hierarchy	Collaboration in network/ community
Objective	Efficiency, control, continuous improvement	Renew, create value, adapt, grow
Source of power	Positional,	Personal,
	Formal	emergent, informal
Typical image	Directors, (people) managers	Dynamic hierarchy, temporary, shared
Leadership style	Directive-Transactional	Transformational, empowering
	(working above people)	(working with people)
Teams/groups	Manager led	Self-managing / -organizing (coached)
Employees/agents	Loyal, obedient, efficient	Self-leaders, take initiative, empowered
Managing in the middle <sup>e</sup>	Strategy implementation	Less uniform and standardized. The work of a group of leaders (Eg. community, network leaders, coaches, catalysts, social marketeers…)
At the top	Top down push & pull	Empowering
	Representing	Living in paradox
Leadership Development	Limited, happy few, human capital	Essential, social capital (e.g. network practices), self-leadership
Leader development	(Strategic) management	Empowerment, governance, identity

Source: Marichal and Wouters, in press

In a hierarchical organisation we would call this middle management. In a collaboration in network/community context, this function is not relevant. Hence 'managing in the middle' refers to the tasks and activities aimed at connecting the top and the persons involved in executive tasks ("agents").



# 2.2 Key elements for leadership and development in networks

Mandell, Keast <sup>13</sup> distinguish coordinative and collaborative networks. In "coordinative" networks people integrate the delivery of individual services into a coordinative effort, e.g. care delivery for the individual patient. Collaborative networks involve sharing of expertise and information and are most appropriate when systems change or innovation is needed as with the EBP Programme (resulting from the EBP Plan). They identify three topics to address in collaborative networks: building cohesion, forging collaborative ways forward and creating supportive social infrastructures. Kaats and Opheij <sup>14</sup> also emphasize that the first thing to do is setting a common ambition that clarifies why a strategy of collaboration is needed. This involves workshops to discuss the problem, the way forward, the individual agendas, resulting in a charter with a clear mission, goals and rules of conduct. They also state that people and group dynamics come first in a network and facilitation is needed to install a constructive, trust building process of collaboration. Structure elements and supportive infrastructure follow this dynamic.

Network development and management is specific leadership work. McGuire and Silvia <sup>15</sup> distinguish four tasks. The first is activation: identifying and incorporating participants and resources, gatekeeping. The second is framing: facilitating agreements on roles, rules, values, objectives, creating a shared mental model. The third is mobilizing: building reputation, creating ongoing support for network members to participate and help the members to legitimize their contribution for their own organisation. The final category is synthesizing: create an environment and set conditions for productive collaboration, achieve the purpose. Saz-Carranza and Ospina <sup>16</sup> distinguishes capacitating, bridging and framing as similar and necessary leadership activities to enhance the effectiveness of a network.

Although it is an emerging field, there is empirical research on leadership of networks <sup>15</sup>. Silvia and McGuire <sup>17</sup> found that public managers leading

networks showed more people oriented behaviours, compared to the leadership of their own agency. Their style is described as 'integrative' and consists of behaviours as treating all network members as equals, sharing information, share leadership roles, create trust, be mindful of external environment. They are less task masters. *Structure and strategy follow people and dynamics*. Not only behaviours count. O'Leary, Choi <sup>18</sup> examined 305 US senior executive service agents and found out that the individual attributes of open mind and patience are key for successful collaboration. Next to that, interpersonal skills as listening and communicating, and also group process skills as facilitation, negotiation and conflict handling were important.

Network leading is not about commanding and controlling, but more about installing a safe environment in which leadership can be distributed, decisions can be made in a participatory way, differences are respected, shared value comes first. Weibler and Rohn-Endres <sup>19</sup> compared two similar cases that both used a NAO (as proposed for the EBP Programme in SB2 and in the first Synthesis) to govern the network. One network was smaller and more homogeneous. This made it easier for the group to trust each other. The facilitator of the network invested time and energy to prepare the process of relating and dialogue and kept structure at a minimum. This network learned to become reflective and generative as a whole and developed network leadership, leading to higher outcome. The other network was larger, more heterogeneous and its facilitator relied more on formal structure and meetings. The result was less shared leadership and less network outcomes.

In conclusion we argue that networks need a coordinator/catalyst/leader<sup>f</sup>. This person needs to have the right mind-set and competencies. His or her focus should be on empowering the network to learn to exchange information, solve problems and take decisions together. This is developmental work and comes before structural and formal support. From the governance side, trust is needed and a clear mandate to allow emergent, shared leadership as conditions for results at network, systemic level. The network leaders and their networks should be supported in finding the right

This does not mean that hierarchy is not necessary. However, it is hierarchy with a different role and style, enabling shared leadership.



practices and tools as it is not comparable with the dominant leadership practices in hierarchies.

# 2.3 Sense breaking, sense giving & sense making process in leadership transformation

Implementing EBP is also implementing a new mind-set about health care and professionalism. Changing a mind-set is identity work: professionals need to adapt their current belief system. This change has impact on identity level. We define identity as "reflexively organized narrative, derived from participation in competing discourses and various experiences...".<sup>20</sup> It is the self-referential answer to the question "who am I", in this project "Who am I as a health professional?" <sup>21</sup>. Identity is a root construct in social science solving the need of people to belong (social identity, role identity) as well as the need to be unique (personal identity).<sup>21</sup> For health professionals identity means as well belonging to a group of professionals, regulated by institutions <sup>20</sup>, as being an unique professional.

Identities are not stable. They are multiple, can be situated (more temporary and superficial) or deep (more stable and cross-situational)<sup>21</sup>, provisional, possible <sup>22</sup>, positive <sup>23</sup>, less or more complex <sup>24, 25</sup>. They can be threatened by events in the context, potentially harming the value, meaning or enactment of the identity <sup>26</sup> or they can be inconsistent, creating identity conflicts caused by conflicting demands or individual needs <sup>27</sup>. Threats and conflicts can have severe negative impact. It can for instance deflate the sense of belonging, lower self-efficacy, create anxiety and negative thoughts, all leading to less performance <sup>28, 29</sup>.

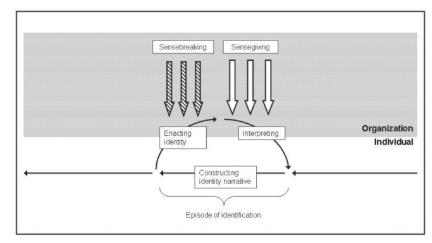
EBP affects the way the autonomous professional is used to work and is therefore likely to initiate such an identity threat. Identity threat predicts resistance to change <sup>30, 31</sup>. Professionals confronted with identity threat can be expected to discourage rather than encourage EBP and hinder the implementation of evidence based guidelines. Identity threats or, in other words, dealing with the negative consequences of EBP for the self-image of professionals calls for attention: network leaders should be aware of these effects on identity.

To increase the adoption of the right mind-set about EBP, two governance activities are important: sense breaking and sense giving (Figure 2). Sense breaking is about clarifying the needed change, making it concrete in terms of timing, budget, indicators, measurements, formal development programs and more to give the message "things need to change". If the needed change is not clear, people will negotiate it and justify their old behaviours and the status quo <sup>32</sup>. Sense breaking activities question "who one is". They accentuate competency gaps, in this case the gap between non EBP and EBP. Sense breaking creates tension, negative emotions as anger and uncertainty.

Sense breaking is not enough for people to change and can lead to rigidity <sup>33</sup>. It needs to go hand in hand with sense giving. Sense giving is about supporting, helping, recognizing, trusting, empowering. The combination of sense giving and sense breaking allows individuals to reconstruct their identity narrative. This is called "sense making". They make sense of the change, try new behaviour, interpret it and integrate it in their new professional identity. See Figure 2 for this process model of change at identity level. Note that in Figure 2 "sense making" can be situated at the level of the construction of an identity narrative: it is a combination of (inter)action and interpretation at the individual level.



Figure 2 – The process model of identification



Source: Ashford, Harrison & Corley<sup>21</sup>, p. 341

Identification will be needed for installing the EBP network and for implementing EBP at practitioner level. The EBP network will need clear decisions, metrics and assessments and at the same time support and guidance to enact and interpret and make sense of this new reality. The practitioners also will need clear structures, objectives and consequential action and at the same time active support to develop EPB as part of their professional identity.

### 2.4 Hard change

The choice of change strategy will depend on the complexity of the issue at hand. When the problem is clearly delineated, and the different stakeholders share the same view on the problem, we call this hard problems. These problems can more likely be handled easily and speedily compared to situations with soft problems, where issues are contentious and there is a high level of emotional involvement on the part of those likely to implement the change and those who will be affected by it <sup>34</sup>.

Hard change is an approach to system change which can be best applied in the relatively bounded situations described as hard complexity. The underlying assumption is that clear change objectives can be identified, in order to identify the optimal way of achieving them. Additionally, these objectives should be such that it is possible to quantify them or to define them in a concrete way that one can know when they have been achieved. There are different models that reflect this way of thinking, of which we describe the hard systems model of change <sup>34</sup>.

In the hard systems model of change we identify three different phases:

- 1. Description phase: describing and diagnosing the situation, understanding what is involved, setting the objectives for the change
- 2. Options phase: generating options for change, selecting the most appropriate option, thinking about what might be done
- 3. Implementation phase: putting feasible plans into practice and monitoring the results

Hard change originates in a rational logic, and requires a change agent equipped with analytical skills, content expertise and presentation skills as this will be a top-down approach where the ownership lies with the change team. Planning and control are essential aspects of the way of working: there are clear objectives, which can and will be measured. The process is carefully planned, aimed at attaining the best solution for the problem with a clear and guaranteed result. The project is successful when end-users comply with the new situation. The underlying leadership model is hierarchical leadership, where leadership is inherently linked to the most powerful person in the group, and is associated with authority and position as formal leader <sup>35</sup>

31

In the following situations hard change is likely to be effective <sup>34</sup>:

- For problems with hard complexity,
- when choices can be based on rational decision making
- when there is reason to believe that resistance to the planned changes will not be high
- and support from the top is essential.

The hard change model can also be effective to begin to diagnose a change situation, before categorising it into hard, soft or wicked problems.

For the implementation of EBP practices, the advantages of using hard change could be that the process and expected result is very clear, it is easy to monitor (see SB5) and it fits the governance structure (see SB2). There are also some disadvantages attached to this choice namely the centralisation of the workload, and the fact that problems with a high level of complexity might be difficult to cover by the system change team (see further in 2.5 and 2.6).

### 2.5 Soft change

Whereas hard change is best suited to tackle hard problems, soft change will be a better choice for soft problems, which are less clearly defined, when there is no agreement on the problem, let alone what changes are required.

Soft change emphasizes not only the content and control of the change, but also the process by which change comes about. Designing change will also include attention to issues such as problem ownership, the role of communication and the participation and commitment of the people involved in the change process itself. This challenges the notion that planning and implementing change can be wholly rational, and requires participation in the process <sup>34</sup>.

The underlying assumption in soft change is that change affects individuals. Because these individuals have feelings, needs and aspirations, soft changes are involved in cultural, political and symbolic processes that bind them together. Organizational development is the best known paradigm in soft change. A key characteristic is its focus on the process, or the way the change is coming about. The first step is identifying who must be involved in the process, what sort of issues should be addressed and how all this can be facilitated. The phases are less clearly defined and it takes some time before the problem itself is agreed upon.

In soft change, we can identify the following high-level phases, which will be iterated when needed:

- Diagnose the current state or situation AS IS
- 2. Develop the future state and a vision for change TO BE
- Gain commitment to the vision
- 4. Develop an action plan
- 5. Implement the change
- 6. Assess and reinforce the change

Soft change is not a linear process, and there will be iterations between the phases. It is for example unclear whether to start with the AS IS or the TO BE – as these steps will intertwine. It also might be necessary to adapt the vision of change in order to gain commitment of the stakeholders. Additionally, soft change does not succeed without some established facilitation function, and the change agent or the facilitator, plays a key role.

Soft change departs from a participative logic, to achieve successful change stakeholders need to be involved. The process is top-down led, but takes into account bottom-up input and requires feedback to be effective. The process is planned, but can change down the road. Similarly, the result is envisioned but not guaranteed. The ultimate goal is to build an expert network that will adapt to changes in the environment. Individuals are committed to the target of the change, and will actively contribute to achieve the envisioned system change. The role of the change team is to supervise and provide direction for the change, rather than controlling the organizational change. Leadership can be developed (independent of any



formal assignment) and is closely related to influencing people as a way to increase and improve leadership skills <sup>35</sup>.

Soft change is best suited in situations that require attention for both the content, or what should be achieved in the change, and the process, or how the change should be attained. It takes into account individual needs and aspirations, and offers tools and methodologies to handle resistance.

However, critics highlight that it does not work in all organisation cultures. Especially in cultures with a strong adherence to bureaucratic norms and behaviour patterns, when there are multiple authoritative decision makers with multilevel accountability and reporting relationships, a soft change strategy might be difficult to follow.

For the implementation of EBP practices, soft change offers some advantages. First, issues and/or resistance to change will be known earlier in the process thanks to the involvement of multiple stakeholders in the participative approach. Second, the target group will invest in the process and as such have a higher commitment to the goals of the system change. Third, as the stakeholders are involved in the learning process the system change can be adapted when new information arises. Some of the disadvantages are that the iterative process might take longer, and that the result is not guaranteed.

### 2.6 Complexity change

Next to hard and soft problems, organizations may deal with wicked problems. "Wicked problems are poorly formulated, boundary-spanning, ill-structured issues with numerous stakeholders who bring different perspectives to the definitions and potential resolution of the issue or problem. In wicked problems each issue can be seen as a symptom of others, each issue is unique, no definitive solutions are possible, and there is no "stopping rule" that determines the problem's end or is likely to satisfy all stakeholders. From a change perspective, wicked problems are defined by dynamic, interconnected issues that influence and are influenced by complex systems in which different institutions are important actors. Wicked problems are what Ackoff (1974) called messes and Trist (1983) labelled meta-problems (Waddock et al., 2015, pp.996)." <sup>36</sup>

Hence, these issues need to be dealt with holistically. Piecemeal solutions will not work because of the interconnectedness, interrelatedness, and interdependence of the elements. When handling these issues, it is unrealistic to define a definitive (enumerable or well-described) resolution beforehand, as all stakeholders bring different perspectives <sup>37</sup>.

As these wicked problems are complex, dynamic, interdependent, emergent and co-evolving, they have no predetermined or predictable outcomes from efforts to change systems, and each system is unique. Therefore, no established change methods or approaches are likely to work consistently.

In this case complexity change is the strategy best suited to tackle the issues at hand. Complexity change does not subscribe a clear change process, instead it proposes leverage points for change <sup>38</sup>:

- System change is not linear: instead of building on cause and effect diagrams, small actions may result in big changes, and big actions may result in small changes. Change agents will need to "promote selforganizing processes and learn how to use small changes to create large effects" (Burnes, 2005, p. 82).<sup>39</sup> This is also called the 'butterfly effect'.
- 2. There are only a few powerful individuals, and this power is defined by their connectedness with other individuals or centrality in a network <sup>40</sup>. Through their connections these few powerful people can spread system change quickly in their network through role modelling. Connected individuals will copy their behaviour and as such a critical mass will arise.
- Individual changes culminate in a tipping point, creating system change
   when sufficiently large groups of individuals demonstrate a specific behaviour, the rest of the group will follow.



Complexity change posits that change emerges, and that it cannot be managed top down. It is a decentralized process, and the initiation and ownership of the change is spread throughout the system. The results will be hard to predict, as the process is very organic and will not be linear. The goal of complexity change is ownership with the end users, a principle that is already installed during the change process. A living system is created where all individuals constantly adapt to changes in the environment. The change agent will enable and support the owners of the change, the informal leaders in the system. The underlying leadership model is shared leadership, where leadership is the property of the group, leadership is a process where group members collectively cooperate and make decisions 35.

For EBP, this change model would encompass the largest added value, as ownership is created throughout the entire group of individuals concerned. However, it also requires knowledgeable and mature actors. One cannot be obliged to take up ownership, and needs to understand why this is important, what the impact is of own actions on the broader community. In the current context, where the creation of awareness and change readiness is prevalent and are the first goals to start with, implementing complexity change in its purest form would be too time and effort intensive. Hence, at this stage we will use only aspects of complexity change.

### 2.7 Change in the context of the EBP Programme

In the context of the EBP Programme, the set-up of the governance structure as described in SB2 and the first Synthesis, i.e. the transition from the current situation to the new organisational framework, is an issue that can be solved by hard change management, including definition of quantitative objectives, a planning of appropriate strategies, evaluation of outcomes, and all this in a top-down approach.

Implementation of guidelines or other EBP products is mainly a soft change issue: health care professionals need to change their practice. Such a change cannot be forced, it requires their participation and commitment. Especially during the first stages, it will go hand in hand with resistance to change and it can lead to negative feelings and emotional involvement. Complexity change and shared leadership are also crucial for EBP implementation in the care sector, but it requires a certain degree of maturity

of the health care professionals since they cannot be obliged to take up responsibility and should understand why this is important. In practice, the most appropriate strategy is probably to set up a top-down approach that takes into account bottom-up input and feedback (soft management) during the starting phase of the actions aiming to improve EBP implementation in Belgium. This first phase is the most sensitive because primary care professionals must be convinced to use EBP more frequently. Once the programme will be launched and stabilised, central steering should be less prominent and it should let shared leadership fully play its role in EBP implementation in the care sector.



### 3 CHANGE READINESS OF PROFESSIONALS IN PRIMARY CARE

Because evidence based practice in primary care is the first target of the EBP Programme, the focus of this chapter is on this specific area.

Change readiness is one of the levers of implementing EBP. Through communication we aim to build a sense of urgency (see section 5) and as such increase change readiness with primary care professionals. Amongst the possible definitions of change readiness, we adapted the definition of Armenakis, Harris and Mossholder (1993) which states that change readiness is an individual's "beliefs, attitudes, and intentions regarding the extent to which changes are needed and the system's capacity to successfully undertake those changes" (pp. 681).

Based on Holt, Armenakis, Field and Harris (2007)<sup>43</sup>, we highlight the five dimensions of change readiness:

- 1. Change self-efficacy or change confidence. This refers to "the extent to which one feels that he or she has or does not have the skills and is or is not able to execute the tasks and activities that are associated with the implementation of the EBP" (pp. 238)
- 2. Discrepancy or the need for change. This refers to "the extent to which one feels that there are or are not legitimate reasons and needs for the implementation of EBP" (pp. 238).
- 3. Personal "valence" or personally beneficial. This refers to "the extent to which one feels that he or she will or will not benefit from the implementation of EBP" (pp. 238).
- 4. Societal "valence" or societally beneficial. This refers to "the extent to which one feels that the society will or will not benefit from the implementation of EBP" (pp. 238).
- 5. Political support. This refers to "the extent to which one feels that the societal leadership and management are committed to and support implementation of EBP" (pp. 238).

This level of detail is a powerful focus in setting-up the communication to create a sense of urgency and build a guiding coalition (see section 5). For

EBP this could mean that part of the communication is targeted towards explaining that most primary care practitioners already use EBP, and that it is only about implementing this more systematically (self-efficacy). This message could be spread by practitioners themselves, for example through social media. One of the communications could also appeal to personal benefits for practitioners who use EBP: this will enhance their reputation and as such give them more patients to treat (personal "valence", see above). Setting up a big, targeted campaign and a well-organized initiative is also a demonstration of political support. Finally, showing practitioners the disadvantages of not implementing EBP, and how often this is the case will accentuate the societal valence and the current discrepancy. Continuous exposure to these change messages will be achieved by combining multiple channels such as educational meetings, information leaflets, information campaigns, social marketing, personalised email, visits etc. Repetition is key to anchoring the message in practitioners' minds, and using diverse messages and alternative channels will maximise the effectiveness.

Change readiness in the context of the Belgian EBP Programme has been evaluated before. The studies that have been conducted by KCE in previous years explored this domain. The conclusive observations on change readiness among the specific groups of professionals in primary care in Belgium can be found in detail in chapter 3.3 in SB1, structured for six professional disciplines.

In practice, change readiness of professionals in health care is a dynamic phenomenon that is highly contextual. It therefore needs periodic attention in order to secure that effective interventions are undertaken by the EBP Programme. To that end indicators on change readiness, are to be further elaborated in the scope of the logical framework that is presented in SB5 on Performance Management.

In SB4 on Implementation, change readiness is dealt with in the context of implementation models, such as the PARiHS model.



# 4 THE ROLE OF EXPERT NETWORKS IN EBP IMPLEMENTATION

### 4.1 Structuring continuous change: expert networks

In this section, the focus is on expert network learning concepts. A selected and coherent set of concepts is presented that fit in a change approach where (shared) leadership of health care professionals is core, soft change and sense making are predominant, and learning in thematic (temporary) networks that are initiated and owned by professionals is vital. Change of behaviour is an ongoing challenge for the professionals concerned and also for the NAO who has to support the learning in networks and the consolidation of lessons learned. This is a dynamic process that requires a dynamic leadership and learning structure that is adaptive to changing themes, contexts and interests among temporary groups of professionals.

The common denominator in a (temporary) thematic area is the impact of several EBP guidelines (or other EBP products) on the respective practices of professionals from one or different professional disciplines. A (temporary) network of professionals aims at studying and understanding implications of EBP products on clinical practice, and aims at continuously translating them into improved practices (often implying many different health care providers, for instance in the field of diabetes). Conceptually, such a network refers to the concept of "communities of practice".<sup>44</sup> This is a manifold used term in later years once internet became persuasive for all kinds of temporary interest groups. Two core aspects as stipulated by Wenger<sup>45</sup> and later on other researchers are relevant here.

- Different from often volatile communities of interest, communities of practice engage practitioners, professionals who want to share their reflections on an overlapping area of work.
- The added value of learning communities, in comparison with communities of practices, is to go beyond the sharing of experiences and let new (collective) knowledge emerge<sup>45</sup>
- Focus of the practice is a specific domain, e.g. a specific EBP guideline that is considered to be a common challenge for improvement.

For the acceptance by health care professionals and for the branding of the EBP NAO approach, it is important that the NAO applies and further develops its own model of communities of practice (CoP's), here further on titled as 'expert networks'. Conceptual building blocks may be retrieved from continued research work by Wenger et al (2011)<sup>46</sup>. A quite interesting literature review and attempt to draft a conceptual framework for research on effectiveness of (digitally enhanced) communities of practice in health care was conducted by Bertone et al. (2013).<sup>47</sup> Taken from two literature reviews they analysed 25 papers. They published their results in a paper<sup>47</sup> as part of a larger theoretical and empirical agenda of work and research pursued by their team. The authors are involved in several communities of practice of the Harmonizing Health in Africa initiative, supported by the African Development Bank, UNAIDS, UNFPA, UNICEF, USAID, WHO, the World Bank, and several countries. In this paper, they present and analyze their conclusions, pointing at the necessity for a dynamic approach of communities of practices that builds on insights from knowledge management theory. They present a preliminary conceptual framework for further research on CoP's in the scope of knowledge management, coined as CoPKM. Regarding the scope of the National EBP Programme, their attempt is relevant as they position their model of a CoP as a dynamic entity: "the challenge of the CoPKM is to constantly and dynamically mobilize new resources for its development and success."



Evidence of effectiveness of learning in expert networks in health care is scarce (UK Alliance for useful evidence; 2016)<sup>g</sup>. This has to be taken as a reminder that new concepts are not to be appreciated because old concepts failed or have shown to be not responsive to new societal developments. Nevertheless, it is indeed the case that a highly structured field as health care does not show many promising examples of interdisciplinary networks as of to date.

Regarding use of evidence in learning and expert networks, the UK based Alliance for Useful Evidence<sup>49, 50</sup> (introduced in more detail in the section 1.5.2. in SB4) presents the following observations:

- Community creation, bringing users together in digitally supported communities of practice, requires leadership of social dynamics which relates to the role of leadership in change and in expert networks.
- The Alliance stresses the importance of addressing concepts of adult learning, also when it concerns health care professionals and patients.
   When supporting expert networks, lessons learned from adult education need to be taken into account.

### 4.2 Change in the era of digitalisation

The focus of this section is on the use of digital means in EBP implementation and change: not in an instrumental way, limiting to IT devices and digital files, but in an enabling way.

The current Belgium Government's policy foresees to get an encompassing digital health structure in place, where the citizen owns his or her health data (eHealth-Platformh). Furthermore, a platform to centralise dissemination of guidelines and other EBP products (EBMPracticeNet) has been set up, to give professionals broad access (24/7 anywhere) to trusted information. The National EBP Programme will have to build on this infrastructure, but should also take social media on board.

Indeed, an ever-expanding number of social media surrounds the user, who is state-of-the-art supported by (international platforms of) digital services that are personalized and contextualized. These social media could have an important contribution to the awareness of primary health care professionals about EBP guidelines and products. They also could support the building of local expert networks ultimately improving the implementation of EBP products through contacts of the primary health care professionals with their peers.

No specific concept has been found in the literature regarding the enabling and bridging role of technology to include patients and patient organisations as change agents. In the scope of the EBP Programme, this remains an important point of attention for further elaboration in operational thematic contextualised change plans. Interesting is that modern technology such as social media could help to inform patients and patient organisations about the practice of EBP in a specific thematic area that is to their interest. This might contribute to a better mutual understanding between patient and health care professional, which in turn might facilitate the use of EBP information.

g http://www.alliance4usefulevidence.org/

https://www.ehealth.fgov.be/nl/home; https://www.ehealth.fgov.be/fr



# 5 DESIGN PRINCIPLES FOR THE OPERATIONAL EBP IMPLEMENTATION PLAN

The final goal of the introduction of a national EBP Programme is to improve patients' outcomes by increasing the use of EBP guidelines and other EBP products by primary care professionals.

Kotter <sup>51</sup> offers a comprehensive framework to install system change that could be informative in the context of the national EBP Programme (see Figure 3), taking into account a structure that combines a hierarchical organization to manage the efficiency and effectiveness at large aiming at all professionals in primary care, combined with an expert network of primary health care professionals.

At the heart of Kotter's dual structure there are five principles that should be met by the governance and monitoring structure of the National EBP Programme as was described in previous chapters, and can be operationalised for a stepwise change and implementation approach by the NAO:

- 1. Many change agents, not the usual few appointees. Working with soft change approaches (in particular the expert networks) enables the National EBP Programme to mobilise new participants, not only guidelines developers, but also practitioners who are motivated to focus on learning in and on practice; in that sense taking leadership roles as part of their personal mission to enhance the impact of their work and of the joint efforts of colleagues in their network while they focus on a common challenge.
- 2. A want-to and a get-to—not just a have-to— mind-set. Mobilizing change champions is only possible if they want to be change agents.
- 3. Head and heart, not just head. People won't go the extra mile if you only appeal to logic. They have to be emotionally touched as well. Hence, emotion will be an important part to include in the communication strategy.

- 4. Much more leadership, not just more management. In the hierarchy you will need competent management. But to manage the expert network leadership is required to manage different processes, languages and expectations. As a leader you can claim a leadership position, but it will only be effective if you are also granted or entrusted with this position<sup>52</sup>.
- Two systems, one organization. The expert network and the hierarchy (as organised by the NAO) are inseparable, and each serve their specific purpose. As such both have to connect and respect each other's existence.

Underneath (see Figure 3) we specify (the cycle of) the steps to build this dual structure and engage practitioners to implement EBP. These steps are instrumental to gaining commitment to the vision, developing an action plan, implementing, assessing and reinforcing the change.

3

Figure 3 – The Eight Accelerators (Kotter, 2012<sup>49</sup>)



### Create a sense of urgency

Creating a sense of urgency is a strong competitive advantage. It creates the opportunity to engage a group of volunteers and ensure that the dual operating system continues to work effectively. The focus will shift to opportunities and help the network to grow. Without an abiding sense of urgency, it will be hard to expand the implementation of system change.

The goal and focus areas are defined top-down through hard change, based on solid analysis of e.g. the importance of a topic, possible impact and number of actors involved. This will substantiate the communication that is essential in creating a sense of urgency. Increasing awareness and change readiness, is the first step of soft change.

In this step we primarily want to engage innovators as defined in section 3.2.4.2. in SB1. They are open for EBP in their domain and just need incentives to implement these EBP's, such as the visibility of the necessity, colleagues and patients talking about this or an easy way to acquire the needed information. In this group the change champions (see section 3.2.4.1. in SB1) will be recruited to build a guiding coalition.

We also aim to increase interest in the group of early adopters (see section 3.2.4.2. in SB1), as they will be the second group to engage in the implementation of EBP. Effective communication will also reach the silent majority (see figure 8 in SB1), in a way that they are aware of the initiative and the fact that it will probably impact their way of working in the future.

### Build and maintain a guiding coalition

The guiding coalition is the core of the network, and is made up of volunteer experts from throughout the system. It must be made up from people who are trusted, and represent the different stakeholders. If possible, it is a very strong signal if people fill in application forms to join the guiding coalition. It will ensure their commitment and allows you to select the best ones. The social dynamics of a guiding coalition are often uncomfortable at first, but once the team works well, they will accelerate the change. In the guiding coalition you want to engage the innovators who are willing to do an additional effort and recruit them as change champions. Recruiting does not refer to paying them to be in your team, but bringing them together to think and work on spreading EBP. These change champions are ready to change their practices and actively want to look for evidence to improve the quality of care delivered. They will function as an engine to accelerate the implementation of EBP by for example providing feedback about communication strategies, or supporting the organization of EBP trainings. This group will champion the EBP implementation.



#### Formulate a general vision and develop change initiatives

The guiding coalition will formulate the vision based on the EBP Programme objectives and specify general change initiatives, starting from the overall strategic vision as defined by the Steering Group. The vision will function as the true north, and hence should be sufficiently clear and engaging. A vision should describe what the implementation of EBP should look like in the future (e.g. in five years) and should be both strategically smart and emotionally appealing. In a next step, general initiatives, critical to achieving the vision, should be defined. One could expect pilot areas to be defined at this stage, as well as specific approaches to be tested out so they can be applied to other areas. The NAO together with the change champions will make the vision more specific and lay out the change initiatives. Performing this step together provides the group a common goal, give ownership to the participants and ensure that they are engaged to realise the objectives.

## Communicate the vision and the strategy to create buy-in and attract a growing (volunteer) expert network

A great vision and concrete change initiatives, communicated in ways that are both authentic and memorable, will motivate people to discuss them without the cynicism often associated with top-down communications. These communications might even go viral, and as such spread without additional effort. Specific evidence based practices might be shared through social networks, or testimonials in conferences, by practitioners who can embed it in the daily reality.

This step will require specific attention. It will for example be necessary to spread the message through different channels, in different ways to ensure the EBP Programme objectives are clearly understood by the professionals. This will motivate the change champions, increase the engagement in the broader innovator group, and influence the attitude of the early adopters. A broader group of the innovators will actively start to implement EBP, and search for additional practices to improve the health service quality. As such they 'volunteer' and start to champion the implementation of EBP in their treatments. They can also be contacted to take actively part in the change champions group and support the actions to further develop and spread EBP. It will also impact the attitude of the silent majority: continuously

bringing the EBP under the attention, lowers resistance and increases social pressure to implement them.

In this step we integrate principles of complexity change: we build on the strengths of a selected few well-connected powerful individuals to build commitment in a broader expert network. This will help us to work towards a tipping point, where sufficient individuals adapt the EBP and system change is created. Ownership of the change is spread over the change champions and in the expert network, so it will be important to loosen control and support individual initiatives of those actors capable and willing to take up responsibility.

## Accelerate movement toward the vision and the opportunity by ensuring that the network removes some barriers

Not all issues can be solved by the change champions themselves – and therefore it is of primordial importance that they can build on the strengths of the expert network. Together change champions can work to remove some barriers and continue the implementation of EBP. This step accentuates the importance of providing support to the change champions: ensure that the difficulties and resistance they encounter are not barriers to continue their work. They will need peers to discuss with, and other support (such as political or communication) to help them continue their work.

### Celebrate visible, significant short-term wins

To ensure that the motivation and energy in the expert network remains high, it is important to celebrate the short-term wins. These have to be visible and clearly linked to the vision developed in the EBP Programme. Examples could be learning events, seminars abroad or expert meetings where they can share their experience and special events within the expert network. But also external visible events and recognition for the efforts of the change champions and the broader expert network are to be taken into consideration.



### Never let up. Keep learning from experience. Don't declare victory too soon

System change is a long endeavour, and the energy should be fuelled systematically. Providing the expert network with information on progress, overall planning, learning and interaction possibilities as well as responding swiftly to questions are some levers that may be used. The shared sense of urgency and the vision is a strong instrument to align and motivate the expert network as well. New experts will have to be attracted steadily to keep the group of change champions and the expert network creative and energised. There are cycles in the motivation and dedication of individual members, which needs to be expected. Hence, leadership in the NAO and the expert network has a key role in monitoring needs for new energy and ideas.

#### Institutionalize strategic changes in the way of thinking and working

EBP requires a new way of working and thinking which deviates from the current paradigm which is mainly focusing on guideline production. To ensure the continuous implementation, the installation of practices that will reinforce the new behaviour are instrumental to successful EBP implementation over time. Hence, actions on the people, process and result level will help to reinforce implementation. Possible interventions could be a different approach to educate practitioners in the importance of EBP, to motivate them to actively look for EBP – instead of being obliged; monitoring process indicators to ensure that the correct actions continue to be taken to spread EBP; and evaluate indicators that measure the implementation of specific EBP.



### ■ REFERENCES

- 1. Drath WH, McCauley CD, Palus CJ, Van Velsor E, O'Connor PM, McGuire JB. Direction, alignment, commitment: Toward a more integrative ontology of leadership. The Leadership Quarterly. 2008;19(6):635-53.
- 2. Anderson C, Brown CE. The functions and dysfunctions of hierarchy. Research in organizational behavior. 2010;30:55-89.
- 3. Heifetz RA. Leadership without easy answers. Harvard University Press; 1994.
- 4. Pearce CL, Sims Jr HP, Cox JF, Ball G, Schnell E, Smith KA, et al. Transactors, transformers and beyond: A multi-method development of a theoretical typology of leadership. Journal of Management development. 2003;22(4):273-307.
- 5. Head BW, Alford J. Wicked Problems: Implications for Public Policy and Management. Administration & Society. 2015;47(6):711-39.
- 6. Wassenaar CL, Pearce C. The nature of shared leadership. In: Day D, Antonakis J, editors. The nature of leadership. Thousand Oaks: Sage; 2012. p. 363-89.
- 7. Pearce C, Conger J. All those years ago: The historical underpinnings of shared leadership. In: Pearce C, Conger J, editors. Shared leadership: reframing the hows and whys of leadership. Thousand Oaks, CA: Sage; 2003. p. 1-18.
- 8. Klein KJ, Ziegert JC, Knight AP, Xiao Y. Dynamic delegation: Hierarchical, shared and deindividualized leadership in extreme action teams. Administrative Science Quarterly. 2006;51(4):590-621.
- 9. Aime F, Humphrey S, Derue DS, Paul JB. The riddle of heterarchy: power transitions in crosss-functional teams. Academy of Management Journal. 2014;57(2):327-52.
- 10. Pearce C, Manz C. The New Silver Bullets of Leadership: The Importance of Self- and Shared Leadership in Knowledge Work. Organizational Dynamics. 2005;34(2):130-40.

- .
- 11. Pearce C, Sims H, Cox J, Ball G, Schnell E, Smith K, et al. Transactors, transformers and beyond. A multi-method development of a theoretical typology of leadership. . Journal of Management Development. 2003;22(4).
- 12. Anderson C, Brown CE. The functions and dysfunctions of hierarchy. In: Brief AP, Staw BM, editors. Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews, Vol 30; 2010. p. 55-89. Available from: <Go to ISI>://WOS:000286042700003
- 13. Mandell M, Keast R, Chamberlain D. Collaborative networks and the need for a new management language. Public Management Review. 2017;19(3):326-41.
- 14. Kaats E, Opheij W. Leren samenwerken tussen organisaties. Deventer: Vakmedianet; 2014.
- 15. McGuire M, Silvia C. DOES LEADERSHIP IN NETWORKS MATTER? Examining the Effect of Leadership Behaviors on Managers' Perceptions of Network Effectiveness. Public Performance & Management Review. 2009;33(1):34-62.
- 16. Saz-Carranza A, Ospina SM. The Behavioral Dimension of Governing Interorganizational Goal-Directed Networks-Managing the Unity-Diversity Tension. Journal of Public Administration Research and Theory. 2011;21(2):327-65.
- 17. Silvia C, McGuire M. Leading public sector networks: An empirical examination of integrative leadership behaviors. Leadership Quarterly. 2010;21(2):264-77.
- 18. O'Leary R, Choi Y, Gerard CM. The Skill Set of the Successful Collaborator. Public Administration Review. 2012;72:S70-S83.
- 19. Weibler J, Rohn-Endres S. Learning Conversation and Shared Network Leadership Development, Gestalt, and Consequences. Journal of Personnel Psychology. 2010;9(4):181-94.
- 20. Alvesson M, Willmott H. Identity regulation as organizational control: Producing the appropriate individual. Journal of management studies. 2002;39(5):619-44.

- 21. Ashforth BE, Harrison SH, Corley KG. Identification in organizations: An examination of four fundamental questions. Journal of Management. 2008;34(3):325-74.
- 22. Ibarra H. Provisional selves: Experimenting with image and identity in professional adaptation. Administrative Science Quarterly. 1999;44(4):764-91.
- 23. Kreiner GE, Sheep M. Growing pains & gains: framing identity dynamics as opportunities for identity growth. In: Roberts L, Dutton J, editors. Exploring positive identities and organizations. Building a theoretical and research foundation. New York: Routledge; Taylor & Francis Group; 2009. p. 23-46.
- 24. Pilarska A, Suchanska A. Self-Complexity and Self-Concept Differentiation What Have We Been Measuring for the Past 30 Years? Current Psychology. 2015;34(4):723-43.
- 25. Campbell JD, Assanand S, Di Paula A. The structure of the self-concept and its relation to psychological adjustment. Journal of Personality. 2003;71(1):115-40.
- 26. Petriglieri J. Under threat: responses to and the consequences of threats to invididuals' identities. Academy of Management Review. 2011;36(4):641-62.
- 27. Horton KE, Bayerl PS, Jacobs G. Identity conflicts at work: An integrative framework. Journal of Organizational Behavior. 2014;35:S6-S22.
- 28. Scheepers D, Ellemers N, Sintemaartensdijk N. Suffering from the possibility of status loss: Physiological responses to social identity threat in high status groups. European Journal of Social Psychology. 2009;39(6):1075-92.
- 29. Stout JG, Dasgupta N. Mastering One's Destiny: Mastery Goals Promote Challenge and Success Despite Social Identity Threat. Personality and Social Psychology Bulletin. 2013;39(6):748-62.
- 30. Murtagh N, Gatersleben B, Uzzell D. Self-identity threat and resistance to change: Evidence from regular travel behaviour. Journal of Environmental Psychology. 2012;32(4):318-26.



- 31. Van Dijk R, van Dick R. Navigating organizational change: change leaders, employee resistance and work-based identities. Journal of Change Management. 2009;9(2):143-63.
- 32. Proudfoot D, Kay A. System justification in organizational contexts: how a motivated preference for the status quo can affect organizational attitudes and behaviors. Research in Organizational Behavior. 2014;34:173-87.
- 33. Staw BM, Sandelands LE, Dutton JE. THREAT-RIGIDITY EFFECTS IN ORGANIZATIONAL-BEHAVIOR A MULTILEVEL ANALYSIS. Administrative Science Quarterly. 1981;26(4):501-24.
- 34. Senior B, Swailes S. Organizational change, 4/E. Financial Times Press; 2010.
- 35. Hiller NJ. An Examination of Leadership Beliefs and Leadership Self-Identity: Constructs, Correlates, and Outcomes [Doctoral thesis]: The Pennsylvania State University; 2005.
- 36. Waddock S, Meszoely GM, Waddell S, Dentoni D. The complexity of wicked problems in large scale change. Journal of Organizational Change Management. 2015;28(6):993-1012.
- 37. Waddock S, Greta MM, Steve W, Domenico D. The complexity of wicked problems in large scale change. Journal of Organizational Change Management. 2015;28(6):993-1012.
- 38. Burnes B. Complexity theories and organizational change. International Journal of Management Reviews. 2005;7:73-90.
- 39. Burnes B. Complexity theories and organizational change. International Journal of Management Reviews. 2005;7(2):73-90.
- 40. Chiu C-Y, Balkundi P, Weinberg FJ. When managers become leaders: The role of manager network centralities, social power, and followers' perception of leadership. The Leadership Quarterly. 2016;in press.
- 41. Boyatzis R, Boyatzis RE. An overview of intentional change from a complexity perspective. Journal of Management Development. 2006;25(7):607-23.

- 42. Armenakis AA, Harris SG, Mossholder KW. Creating readiness for organizational change. Human relations. 1993;46(6):681-703.
- 43. Holt DT, Armenakis AA, Feild HS, Harris SG. Readiness for organizational change: The systematic development of a scale. The Journal of applied behavioral science. 2007;43(2):232-55.
- 44. Wenger E. Communities of practice: Learning, meaning, and identity. Cambridge university press; 1998.
- 45. Wenger E, McDermott R, Snyder W. Cultivating Communities of Practice: A Guide to Managing Knowledge. Harvard Business Press; 2002.
- 46. Wenger E, Trayner B, De Laat M. Promoting and assessing value creation in communities and networks: A conceptual framework. The Netherlands: Ruud de Moor Centrum. 2011:202010-2011.
- 47. Bertone MP, Meessen B, Clarysse G, Hercot D, Kelley A, Kafando Y, et al. Assessing communities of practice in health policy: a conceptual framework as a first step towards empirical research. Health Research Policy and Systems. 2013;11(1):39.
- 48. Benahmed N, Adriaenssens J, Christiaens W, Paulus D. Towards tailoring of KCE guidelines to users' needs. Method Brussels: Belgian Health Care Knowledge Centre (KCE). 2017. KCE Reports 284.
- 49. Breckson J, Dudson J. Using Evidence. What works? A discussion paper. 2016. Available from: <a href="http://www.alliance4usefulevidence.org/">http://www.alliance4usefulevidence.org/</a>
- 50. Langer L, Tripney J, Gough D. The Science of Using Science: Researching the Use of Research Evidence in Decision-Making. Technical Report. 2016. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London
- 51. Kotter JP. Accelerate! How the most innovative companies capitalize on today's rapid-fire strategic challenges and still make their numbers. Harvard Business Review. 2012(November):44-58.



52. DeRue D, Ashford S. Who will lead and who will follow? A social process of leadership identity construction in organizations. Academy of Management Review. 2010;34(4):627-47.