

AN EVALUATION PROTOCOL FOR NIHDI CONVENTIONS



2018 www.kce.fgov.be



KCE REPORT 299
HEALTH SERVICES RESEARCH



AN EVALUATION PROTOCOL FOR NIHDI CONVENTIONS

PHILIPPE VANDENBROECK, WENDY CHRISTIAENS, MARIE DAUVRIN, RACHEL WICKERT, KIM BECHER, ERIK HENDRICKX, JO GOOSSENS, LIESBETH JENNÉ, MARIJKE EYSSEN

be



Authors:

Title:

Project coordinator:

Reviewers:

External experts:

External validators:

Acknowledgements:

Reported interests:

An evaluation protocol for NIHDI conventions

Philippe Vandenbroeck (shiftN), Wendy Christiaens (KCE), Marie Dauvrin (KCE), Rachel Wickert (MetM), Kim Becher (shiftN), Erik Hendrickx (KCE), Jo Goossens (shiftN), Liesbeth Jenné (shiftN), Marijke Eyssen (KCE)

Marijke Eyssen (KCE)

Anja Desomer (KCE), Arnaud Fouchard (Haute Autorité de santé, France), François Schellevis (NIVEL), Koen Van den Heede (KCE)

Valère Akafomo(ULg), Valérie Bartsch (ULg), Petra Berth (UZ Gent), Micheline Bon (ULg), Liesbeth Borgermans (Vrije Universiteit Brussels), Bertien Buyse (KULeuven), Jean-Pierre Bronckaers (Liberale Mutualiteit, College van artsen directeurs), Martin Caillet (CHU St-Pierre), Michel Cailliau (Clairs Vallons), Carine De Buck (Clairs Vallons), Ann De Guchtenaere (Zeepreventorium), Bart De Bock (Az St-Lucas & Volkskliniek Gent), Eric Derom (UZ Gent), Philippe Duval (Cliniques de l'Europe), Arnaud Fouchard (Haute Autorité de Santé, France), Aiden Fowler (NHS Quality Improvement and Patient Safety, 1000 Lives Improvement Service, Public Health Wales), Alain Gadisseur (UZs Antwerpen), Marjorie Gangolf (CHU Liège), Michelle Hall (HUDERF), Denis Herbaux (PAQS - Plateforme pour l'Amélioration continue de la Qualité des soins et de la Sécurité des patients), Khalid Ismaili (HUDERF), Michel Mahaux (Santhea), Els Meerbergen (Vlaams Patiëntenplatform), Marc Moens (Imelda), Frank Nobels (OLV Aalst), Koen Peers (UZ Leuven), Philippe Persoons (KULeuven), Christian Pirard (ULg), Rudi Reyntjens (Zeepreventorium), Camelia Rossi (CHU Ambroise Paré), Chantal Seret (Cliniques de l'Europe), Bart Thomas (UZ Gent), Marie Thys (CHU Liège), Jan Maarten van de Berg (IGZ), Dominique Vandevelde (UGent), Viviane Van Elshocht (CM, College van artsen directeurs), Omer Vanhaute (UZ Gent), Chris Van Hul (MLOZ, College van artsen directeurs), Ilse Weeghmans (Vlaams Patiëntenplatform), John Willems (Socmut, College van artsen directeurs), Eric Wilmet (Mutsoc, College van artsen directeurs), Bert Winnen (Kabinet Minister van Sociale Zaken en Volksgezondheid), Antonine Wyffels (Voorzitter College artsen directeurs), Marc Xhrouet (Santhea)

Report validated by Pascal Mertens (CHRSM) and Jan Maarten Van den Berg (IGZ). A third validator, Georges Vereecke had major remarks which were not supported by the other two validators.

Olivier Schmitz (UCL), Tinne Vandensande (KBS – FRB)

'All experts and stakeholders consulted within this report were selected because of their involvement in the topic of Evaluation Conventions Rehabilitation. 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: Michel Cailliau (Member of the staff direction of a conventional centre – Clairs Vallons CMP asbl), Rudi Reyntjens (Board of directors independent sickness funds)



Consultancy or employment for a company, an association or an organisation that may gain or lose financially due to the results of this report: Carine De Buck (Medical direction of a private convention), Marijke Eyssen (Centrum voor ambulante revalidatie)

Presidency or accountable function within an institution, association, department or other entity on which the results of this report could have an impact: Michel Cailliau (Adjunct medical direction of CMP Clairs Vallons (convention INAMI – RIZIV)), Carine De Buck (See point 7), Omer Vanhaute (Convention coordinator UZGent)

Other possible interests that could lead to a potential or actual conflict of interest: Tinne Vandensande (The KBS-FRB has already collaborated with shiftN in the past. shiftN has used the soft systems methodology for a study about patient participation)

Layout: Ine Verhulst

Disclaimer:

- The external experts 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.
- Subsequently, a (final) version was submitted to the validators. The validation of the report results
 from a consensus or a voting process between the validators. The validators did not co-author the
 scientific report and did not necessarily all three 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: 13 February 2018

Domain: Health Services Research (HSR)

MeSH: Multidisciplinary health care; Interdisciplinary health care team; Organizational innovation; Rehabilitation;

Chronic diseases; Outpatient care; Long term care; Quality of health care; Organizational efficiency

NLM Classification: WA 525 Language: English

Format: Adobe® PDF™ (A4)
Legal depot: D/2018/10.273/21



ISSN:

Copyright:

2466-6459

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?

Vandenbroeck P, Christiaens W, Marie Dauvrin M, Wickert R, Becher K, Erik Hendrickx E, Goossens J, Jenné L, Eyssen M. An evaluation protocol for NIHDI conventions. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2018. KCE Reports 299. D/2018/10.273/22.

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



■ TABLE OF CONTENTS

LIST OF	FIGURE	ES	.3					
LIST OF	TABLES	S	.3					
	SCIENTIFIC REPORT1							
1	INTROD	DUCTION	.1					
1.1	CONVE	NTIONS AS A MODEL TO FINANCE/REIMBURSE CARE	.1					
1.2	CONVE	NTIONS AS A MODEL TO FINANCE/REIMBURSE CARE	.4					
1.3	CONVE	NTIONS AS AN AGREEMENT BETWEEN THE NIHDI AND CARE INSTITUTIONS	.4					
	1.3.1	The role of the Board of Medical Directors and the Insurance Committee	.4					
	1.3.2	Overview of the content of the agreement	.6					
	1.3.3	Duration of conventions	.8					
	1.3.4	Existing measures for quality assurance	.8					
2	SCOPE		.9					
2.1		NTIONS ARE USED FOR REHABILITATION AND OTHER HEALTH-RELATED TIONS	.9					
2.2	CONVE	NTIONS TRANSFERRED TO THE COMMUNITIES	10					
2.3	CONCE	PTUAL LEVELS	10					
3	RESEA	RCH OBJECTIVES1	11					
4	A TYPO	LOGY OF CONVENTIONS1	11					
5	QUALITY EVALUATION IN HEALTH CARE: AN INTERNATIONAL PERSPECTIVE12							
5.1		DESCRIPTION OF THE COUNTRIES INCLUDED IN THE INTERNATIONAL RISON	12					
	5.1.1	France	12					
	5.1.2	Scotland	13					
	5.1.3	The Netherlands	13					



5.2	ASSES	SMENT OF QUALITY OF HEALTH CARE IN FOUR COUNTRIES: METHODOLOGY	13
	5.2.1	Scope of the literature search	13
	5.2.2	Search process	14
	5.2.3	Analysis	14
	5.2.4	Validation by country experts	15
5.3	CROSS	S-COMPARISON OF THE QUALITY EVALUATION	15
5.4		RGANISATION OF CARE AND FINANCING OF FOUR EXAMPLES OF HEALTH TIONS AND DISEASES	19
	5.4.1	In France	19
	5.4.2	In Scotland	20
	5.4.3	In the Netherlands	21
6	TOWAI	RDS A META-EVALUATION PROTOCOL	22
6.1	APPRO	ACH AND METHODOLOGY	22
	6.1.1	A soft systems-inspired approach	22
	6.1.2	Operationalisation of the approach	26
6.2	FINDIN	GS	29
	6.2.1	Root definition of a rehabilitation convention	29
	6.2.2	VSM-based activity models	30
	6.2.3	Measures of performance	34
	6.2.4	Perceived strengths and weaknesses of conventions as a financing and operational instrument	34
	6.2.5	Perceived weaknesses of conventions contextualised in the VSM-based activity models	41
	6.2.6	Reframing of the research question	45
6.3	OUTLIN	NE OF A META-EVALUATION PROTOCOL	47
	6.3.1	Preliminary outline of a meta-evaluation protocol	47



	6.3.2 Validation in a stakeholder workshop
	6.3.3 Validation with the Board of Medical Directors
	6.3.4 Fine-tuning in collaboration with clinical professionals
	6.3.5 Final version of a meta-evaluation protocol58
	■ REFERENCE LIST63
LIST OF FIGURES	Figure 1 – Organisational chart service for medical care within the NIHDI5
	Figure 2 – Overview of the components of the Child Nephrology convention contract
	Figure 3 – Scope of the project
	Figure 4 – Generic representation of the Viable Systems Model ²⁶ 24
	Figure 5 – The VSM-based activity model at the level of a convention31
	Figure 6 – The VSM-based activity model at the level of the NIHDI33
	Figure 7 – Influence diagram that shows potential dynamics of trust in the broader 'conventions System'40
	Figure 8 – Perceived weaknesses of conventions, considered through the lens of the VSM-based activity model at the level of a given convention42
	Figure 9 – Perceived weaknesses of conventions, considered through the lens of the VSM-based activity model at the level of the NIHDI44
	Figure 10 – A reinforcing loop of trust building, learning and generating relevant management information45
	Figure 11 – The Legitimacy triangle applied to the context of this study46
LIST OF TABLES	Table 1 – List of transferred NIHDI-conventions
	Table 2 – Overview of measures for quality assurance mentioned in agreements
	Table 3 – Typology of conventions applied to the selected health conditions
	Table 4 – Criteria used to collect data on rehabilitation programs14
	Table 1 Chieffa deed to contest data of fortabilitation programs

Table 5 – Key dimensions of the generic quality evaluation in France, Scotland, The Netherlands and Belgium	16
Table 6 – Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in France	19
Table 7 – Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in Scotland	20
Table 8 – Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in The Netherlands	21
Table 9 – List of interviewees (n=26)	27
Table 10 – Key steps in the research process	29
Table 11 – From 'traditional evaluation' to 'complexity-sensitive' evaluation (adapted from ³⁰)	47
Table 12 – Categorisation of the questions included in the draft meta-evaluation protocol in line with the measures of performance	50
Table 13 – Overview of the votes related to the proposed interventions	51
Table 14 – Overview of the votes related to the suggested questions to be included in the meta-evaluation protocol	52
Table 15 – Overview of the votes related to the 'burden of proof' questions	54



LIST OF ABBREVIATIONS	ABBREVIATION	DEFINITION
	AIDS	Acquired Immune Deficiency Syndrome
	ARS	Agence Régionale de Santé (FR) Regional Health Agency
	AZ	Algemeen Ziekenhuis (BE) General Hospital
	BIG	Wet op de beroepen in de individuele gezondheidszorg (NL) / Individual Health Care Professions Act (NL)
	CAQES	Contrat d'amélioration de la qualité et de l'efficience des soins (FR) Contract of the improvement of quality and efficiency of health care
	CAR	Centres for Ambulatory Rehabilitation (BE)
	CHU	Centre Hospitalier Universitaire University Hospital Centre
	CNAMTS	Caisse Nationale d'Assurance Maladie des Travailleurs Salariés (FR) National Health Insurance Funds for Salaried Employees
	CME	Commission Médicale d'Etablissements (FR) / Medical Commission of Institutions
	COMPAQ	Coordination de la Mesure de la Performance et Amélioration de la Qualité (FR) Coordination of the Measurement of the Performance and Improvement of the Quality
	CPAP	Continuous Positive Airway Pressure
	CVS	Chronisch Vermoeidheid Syndroom / chronic fatigue syndrome
	DBC	Diagnosis Treatment Combination
	DGOS	Direction Générale de l'Organisation des Soins (FR) General Direction for Healthcare Organisation
	FTE	Fulltime Equivalent
	HAS	Haute Autorité de Santé (FR) High Authority for Health
	HCS	Health Care System
	HIS	Health Improvement Scotland
	HCO	Health Care Organisations

Inspectie voor de gezondheidszorg (NL) Health Care Inspectorate

IGZ

IQSS Indicateurs de Qualité et de Sécurité des Soins (FR) Health Care Safety and Quality Indicators Institut Scientifique de Santé Public - Wetenschappelijk Instituut ISP-WIV Volksgezondheid ΚZI Quality of Health Facilities Act (NL) LDP Local Delivery Plan (SCO) Ligue des Usagers des Soins de Santé LUSS Multidisciplinary Care MDC NHS National Health Service National Institute for Health and Disability Insurance NIHDI **OLV** Onze Lieve Vrouw Our Lady P4P Pay for performance **PMSI** Programme de Médicalisation des Systèmes d'Information (FR) Program of Medicalisation of Information Systems Q Question Research and Development R&D Système National d'Information Inter-Régimes de l'Assurance Maladie (FR) SNIIR-AM - SHI Interscheme Information Database SSM Soft Systems Methodology

SSM(c)

SSM(p) Soft systems analysis focused on the process to deal with the situation.
SSR Soins de suite et de réadaptation (FR)

VPP Vlaams Patiëntenplatform VSM Viable Systems Model

UZ Universitair Ziekenhuis – *University hospital*

UZA Universitair Ziekenhuis Antwerpen – University hospital Antwerp

Soft systems analysis focused on the content of a situation



■ SCIENTIFIC REPORT

1 INTRODUCTION

1.1 Conventions as a model to finance/reimburse care

The primary aim of this research project was to develop an instrument to evaluate the current NIHDI (National Institute for Health and Disability Insurance) rehabilitation conventions. In the Belgian health care system, 'rehabilitation conventions' refer to agreements between the NIHDI and different types of rehabilitation and multidisciplinary care centres, which at least partly define the activities of the centres and their financing.

During the past decennia rehabilitations conventions have been developed for a large heterogeneity of medical conditions, transcending the field of rehabilitation. The list of conventions can be found in Appendix 1. Agreements are made for:

- Respiratory diseases: respiratory rehabilitation, respiration support, oxygen therapy at home and cardiorespiratory monitoring of babies
- Conditions of the blood- and immunity system: haemophilia, AIDS
- Chronic fatigue syndrome
- Endocrine and metabolic conditions: diabetes, rare monogenetic metabolic diseases, cystic fibrosis
- Cardiac conditions
- Mental and neurological disorders: refractive epilepsy, mental disorders in adults (schizophrenia, anxiety disorder, autism,...), mental disorders in children, hearing-, voice-, and speech disorders, dementia-memory clinics.
- Musculoskeletal and neurological diseases and congenital disorders: neuro-musculoskeletal diseases, cerebral palsy, spina bifida
- Paediatric diseases: child nephrology, morbid obesity, consequences of maltreatment of children and adolescents
- Sensory disorders: visual disorders, hearing disorders



In addition to condition-based agreements, also agreements are made with specific (rehabilitation) centres:

- Unwanted pregnancies
- Care units for chronically ill children
- Addiction
- Sudden unexplained death in young children
- Cardiorespiratory monitoring of babies
- Early problems in mother-child relationship

In addition, agreements are made for reimbursement of specific costs:

- Occupational therapy
- Travel expenses of patients in a wheelchair
- Travel expenses of children in a rehabilitation centre

Some of the rehabilitation conventions listed above will be transferred to the regions in 2018 as a consequence of the 6th Reformation of the State. The 6th State Reform induced a shift in the landscape of health care services. The competencies and budget related to several health care domains were transferred from the federal government to the regional communities. From the 1st of July 2014, some rehabilitation services, including some rehabilitation conventions which were formerly funded at the federal level by the NIHDI, were transferred to the Communities¹⁻⁴. The defederated rehabilitation services include a diverse group of care services (e.g. CAR, psychosocial rehabilitation for adults, care settings for neurological and musculoskeletal rehabilitation, care settings for children with respiratory and neurological disorders) and patients (e.g. autism, addicted persons, persons with hearing/vision impairments, psychiatric disorders in children). Table 1 provides the whole list of transferred rehabilitation conventions.



Table 1 - List of transferred NIHDI-conventions

NIHDI convention number starting with	Description Number of involved institutions (n)					
		Flanders	Wallonia	Brussels	Total	
• 770 & 7840	Institutions for rehabilitation of people with cerebral palsy	0	3	1	4	
• 771 (only a selection, n=8)	Institutions for locomotor rehabilitation	4	2	2	8	
• 772	Psycho-social rehabilitation for adults	12	14	8	34	
• 773	Addiction care	13	10	6	29	
• 7740	Children with psychiatric disorders	3	11	3	17	
• 7745	Functional rehabilitation for parent-children interaction problems	2	0	1	3	
7746	Care for people with autism	3	2	3	8	
• 7765	Institutions for the rehabilitation of children with respiratory and neurological disorders	1	0	0	1	
• 7767	Units for respite care	2	0	1	3	
779	Care for people with hearing impairment	0	0	1	1	
790	Services who make multidisciplinary assessments	76	32	12	120	
• 953 or 965	Centres for ambulatory rehabilitation	48	22	9	79	
969	Care for people with visual impairments	4	3	1	8	

Source: NIH

DI lists updated on 22/02/16 from www.riziv.be (accessed 24/02/16)



The transferred conventions listed in Table 1 were not considered subject to the research at hand, hence were not involved in the data collection rounds featuring this study. Nevertheless, because of its generic character the developed meta-evaluation instrument could also be of use for the transferred conventions. By the 1st of January 2018, each Community should have chosen a model for the organisation and financing of the rehabilitation conventions belonging to its own competencies.

1.2 Conventions as a model to finance/reimburse care

In the KCE report 57 a typology of payment systems developed by Jegers et al. is presented ^{5, 6}.

- At the level of the sponsor, closed-end or open-end financing systems are distinguished. In the former, policy-makers determine a ceiling of expenditures, which may not be exceeded during a certain period, mostly one year. In an open-ended system no budgetary limits are imposed ⁵.
- At the level of the individual provider, two distinctions are made: on the one hand fixed versus variable systems and on the other hand retrospective versus prospective systems. The distinction between a fixed and a variable payment system (fee-for-service), is based on the relationship between activities of a provider and the payment he receives. In a variable system the provider has an ability to influence his earnings by varying his activities, contrary to fixed systems where the provider receives a lump sum determined ex ante and not related to his activities ⁵.

Most conventions, especially older ones, have an open-ended system. However, there is a trend towards more closed envelopes. Sometimes a closed envelope is allocated to a health care centre, sometimes the envelope encompasses all centres in the convention. Examples are cardiorespiratory monitoring of neonates and obstructive sleep apnoea (nCPAP). Providers are mostly salaried, although exceptionally providers are allowed to work nomenclature-based, hence with a fee-for-service.

Conventions 771 do not allow any combination with other nomenclature on the same day, whereas 950 does in the second phase of the treatment ⁵.

Each centre has an individual agreement that stipulates the exact price of a treatment (depending on the convention model and individual criteria).

Regarding the conventions remaining managed by the Federal State, the overall expenses in 2015 were of €340.571.000. Heart defibrillators (amounting for €42.850.000) are not included in this amount, as they are included under the category "Implants"^a.

1.3 Conventions as an agreement between the NIHDI and care institutions

1.3.1 The role of the Board of Medical Directors and the Insurance Committee

The Board of Medical Directors, composed by the medical directors of all sickness funds and coordinated by medical doctors of the NIHDI, and the Insurance Committee are both bodies within the NIHDI.

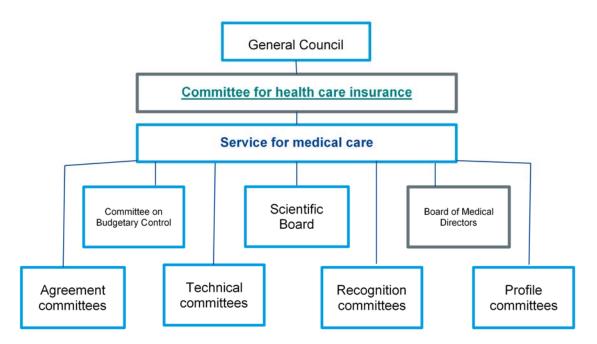
The Board of Medical Directors plays an important, technical and advisory role in the regulation of the conventions. The Board presents the design of the agreements, as well as amendments to the Insurance Committee who takes the final decisions.

The Insurance Committee approves agreements, with reservation of the decision of the General Council and advice of the Budgetary Control Commission, who guard the conformity with the budget. The Insurance Committee closes the convention agreements with the centres. The Committee consists of representatives of all sickness funds and representatives of the care providers. Social partners have an advisory role in the committee.

^a Information received by email from M. Verscuren (NIDHI) on 17/11/2016.

In sum the conventions are developed and technically managed by the Board of Medical Directors, a body within the NIHDI, who advises the Insurance Committee which has decisional competences. Figure 1 presents an organisational chart of the bodies within the Service for Medical Care of the NIHDI.

Figure 1 – Organisational chart service for medical care within the NIHDI



Source: http://www.riziv.fgov.be/nl/riziv/organen/Paginas/geneeskundige-verzorging-organen.aspx#.Wgq4RmhSzIU; 14/11/2017



Types of conventions

Three types of conventions can distinguished:

- Standard: the terms of the agreement are the same for all health care centres within the convention. Every centre is paid the same price for similar acts.
- **Specific**: the terms of the agreement differs between health care centres within the convention. The allocated lump sum is centre-specific and depends on the salary costs (e.g. De Haan, or the Clairs Vallons, two rehabilitation centres specialised in paediatric care)
- Hybrid: the terms of the agreement are the same for all health care centres within the convention, but the allocated lump sum varies between centres.

Most conventions are standard conventions.

1.3.2 Overview of the content of the agreement

A convention is essentially an agreement between the financing authority (NIHDI) and the institution providing care. The specific shape of this contract has evolved over time. We have not done a comparative analysis of how conventions contractually evolved over time. Instead we took a fairly recent and well developed example – the Child Nephrology convention – and made an inventory of its constituent parts. We observed that this agreement stipulates the following elements (see Figure 2):

- The care that has to be provided and how this has to happen, i.e. what
 the responsibilities are of the various team members (program and
 activities). This particular agreement also provides a supporting
 rationale in the form of a care concept.
- The organisation of the center that adheres to the convention in terms of staffing, time investment, and structural integration in the mother hospital.
- The group of patients eligible to receive services from the center (target group).
- The financial resources put at the center's disposal in return for the services provided. This is a lump sum per patient. The agreement also stipulates the maximum number of invoiceable services.
- The **reporting guidelines** as regards service provision, accounting and yearly evaluation.
- The composition and role of the Council of Agreement.
- Overall contractual requirements as regards **period of the agreement**, and the conditions to set up and stop a center.

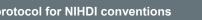
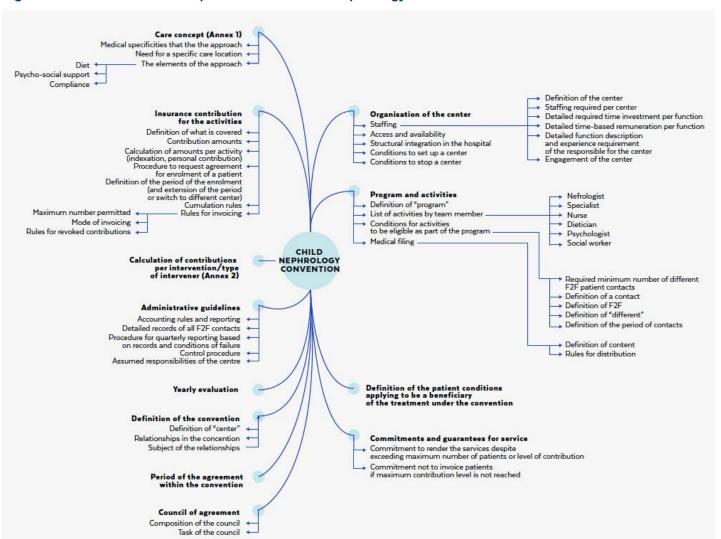


Figure 2 - Overview of the components of the Child Nephrology convention contract





1.3.3 Duration of conventions

On the institutional level, most of the rehabilitation conventions have been established on a temporary basis and are prolonged year by year ⁵.

On the patient level, conventions specify a maximum duration (time between the start date and end date of all treatment sessions) and a maximum number of sessions. These conditions are different from one convention to another depending on the health condition subject to the convention.

1.3.4 Existing measures for quality assurance

Table 2 presents an overview of measures for quality assurance we could find in the agreements between the NIHDI and the health care institutions. Note that not all measures are mentioned in all agreements.

Table 2 – Overview of measures for quality assurance mentioned in agreements

Quality measures

- · Overview of the employed team members and activities
- Production figures
- Expenditures per pseudocode (provision)
- Accounting
- · Register for delivered material
- Control visits
- Annual report
- Notification of the conventions to the patients, their relatives, the healthcare professionals and any other person that may be interested in (e.g. via the NIHDI website)
- Agreement council

- Initiatives for quality promotion consisting of registries. Some of them allow for benchmarking.
- Compulsory minimal number of meetings of the multidisciplinary team
- Development of measures of performance

Of special interest are the initiatives for quality promotion and epidemiology for which the NIHDI collaborates with the Scientific Institute for Public Health (WIV/ISP):

- Initiative for quality promotion and epidemiology relative to diabetes (IKED-study)
- Initiative for quality promotion and epidemiology relative to diabetic foot (IKED-voet)
- Initiative for quality promotion and epidemiology for diabetes in children and adolescents
- The Belgian neuromuscular disease registry
- Belgian cystic fibrosis registry
- HIV registry
- Haemophilia registry (under construction)

For the registries the convention agreement stipulates that the centres who sign it, are to participate in an audit aimed at improving quality of care. This audit is commissioned to the Scientific Institute for Public Health (WIV-ISP).

The data from the audit are used to construct quality indicators regarding the care processes and outcomes. For example for the diabetes in children and adolescents registries the indicators are based on the international recommendations for paediatric diabetes care, issued by ISPAD^b (www.ispad.org).

b International Society for Paediatric and Adolescent Diabetes



Mostly the results of the audits (e.g. those relative to diabetes) are reported in two ways:

- Each centre receives an individualised report in which its performance is benchmarked to the average performance as well as to all other anonymised PDC's.
- A global report in which quality of care is surveyed and epidemiological aspects are reported.

2 SCOPE

2.1 Conventions are used for rehabilitation and other healthrelated conditions

A recent paper of the International Society for Physical and Rehabilitation Medicine 7 presents a comprehensive definition of the concept 'rehabilitation': "rehabilitation can be thought of as a general health strategy with the aim of enabling persons with health conditions experiencing, or likely to experience, disability to achieve and maintain optimal functioning. This includes the consideration of very different settings or professions who deal with rehabilitation issues" 7. Although this is a very broadly scoped definition, some conditions organized and financed by means of a convention cannot be classified under the noun rehabilitation: for example unwanted pregnancies, sudden unexplained death in young children, cardiorespiratory monitoring of babies, and diabetes. Over time the instrument of rehabilitation conventions has been stretched in order to include other conditions for which the instrument was useful. Hence, some of the conventions are not situated within rehabilitation, but are rather oriented towards the treatment of a specific pathology (e.g. diabetes) or undesirable condition (unwanted pregnancy). These conventions are also part of this project. Hence the core issue is not so much rehabilitation as such, but rather (rehabilitation) conventions as a model to finance/reimburse care.

In the following parts of this report we will therefore use 'conventions' instead of 'rehabilitation conventions'.



2.2 Conventions transferred to the communities

It is worth noting that, from the 1st of July 2014, some rehabilitation services, including some rehabilitation conventions which were formerly funded at the federal level by the NIHDI, were transferred to the Communities as a consequence of the 6th State Reform. The transferred conventions were not considered subject to the research at hand, hence were not involved in the data collection rounds featuring this study. Nevertheless, because of its generic character the developed meta-evaluation instrument could also be of use for the transferred conventions.

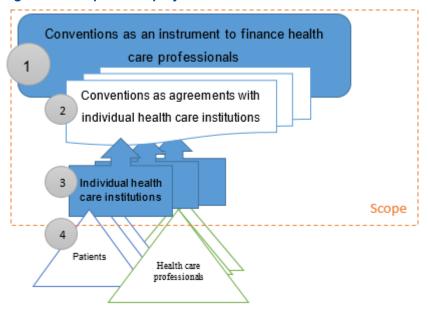
2.3 Conceptual levels

Conceptually four levels are involved (see Figure 3):

- rehabilitation conventions as an instrument
- individual rehabilitation conventions
- care institutions
- · patients and care providers

The research questions relate especially to the top three levels.

Figure 3 – Scope of the project





3 RESEARCH OBJECTIVES

For decades the Belgian National Institute for Health and Disability Insurance (NIHDI) has then set up conventions with specialised rehabilitation and multidisciplinary care centres, leading to a heterogeneous landscape of conventions. The NIHDI requested KCE to develop a **generic methodology to evaluate conventions**. The aim of this research project was not to perform an evaluation, but to develop an instrument that allows the Board of Medical Directors - the body within the NIHDI that has the mandate to technically manage rehabilitation conventions, and the ultimate client for this piece of work - to collect the information needed to feed into this assessment. Hence, the research questions that guided the work documented in the present report were:

- 1. Identify common characteristics and develop a typology of conventions.
- Identify examples of quality evaluation in the field of rehabilitation care at international level.
- What evaluation framework would help the Board of Medical Directors to assess whether so-called rehabilitation conventions are efficacious, efficient and effective? This aimed at producing a meta-evaluation protocol for the assessment of conventions.

4 A TYPOLOGY OF CONVENTIONS

There is a significant diversity in conventions and a generally shared categorisation of the landscape is not available. The conventions differ in objectives, content and implementation.

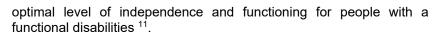
Building on the collected qualitative data we gravitated towards a pragmatic classification in five groups:

- Conventions focused on providing classic rehabilitation services;
- Conventions focused on providing multidisciplinary care ('case management'), e.g. convention for diabetes.
- Conventions focused on providing multidisciplinary diagnosis and support, e.g. convention for obstructive sleep apnea.
- Conventions focused on providing multidisciplinary counselling, e.g. convention for female genital mutilation.
- Outliers that do not fit in either of the previous groups, e.g. abortion clinics.

Each of these groups of conventions could then be further differentiated depending on whether they included financing of the purchase of medical equipment or not.

This typology differentiates conventions between the nature of their activities. A distinction is made between rehabilitation care and multidisciplinary care (MDC).

- Multidisciplinary care is an integrated team approach to healthcare. The
 evaluation of treatment options and treatment planning are collaborative
 processes involving medical and allied healthcare professionals in
 concertation with the patient and the patient's family. Individual, patientspecific treatment plans are developed, and delivery of care becomes
 a shared responsibility ^{9, 10}.
- Rehabilitation is an active process oriented towards a repertoire of multidisciplinary, goal-oriented and sensible activities, in interaction with personal and environmental factors, to reach and maintain an



The notion of MDC foregrounds the integrated character of the care providing process. The definition of rehabilitation is anchored in the desired outcome of the process, i.e. a functional improvement and/or an improvement in quality of life. But both intersect in the collaborative nature of the treatment process. Underlying is also a disciplinary perspective: rehabilitation is particularly shaped by Physical and Rehabilitation Medicine, while multidisciplinary care is a more generic concept that is medical specialism-agnostic.

In addition, the five category typology also makes a distinction between the relative weight of the multidisciplinary contribution of care providers. In case management and multidisciplinary counselling, the multidisciplinary character is maintained throughout the care trajectory. In multidisciplinary diagnosis and support it is particularly concentrated at the start of the care pathway. Finally, a separate category for counselling is justified by the specific nature of psychosocial support focused on a person's emotional, social and mental needs.

This typology does not allow for a rigid classification of conventions. Inevitably there will be conventions that fit in multiple categories. For instance, the convention for female genital mutilation has in this research been used as an example of a convention focused on multidisciplinary counselling. However, while counselling is a key part of the care provided, services may also include advanced surgical interventions (clitoral reconstruction). However, we found that on the whole the typology was seen as useful and clear enough for stakeholders to pragmatically rely on it.

5 QUALITY EVALUATION IN HEALTH CARE: AN INTERNATIONAL PERSPECTIVE

5.1 Short description of the countries included in the international comparison

Three countries were selected by consensus between the KCE experts: France, Scotland and the Netherlands. These three countries face similar issues than Belgium regarding the prevalence of chronic diseases, the aging of the population and the economic pressure on the overall system but have developed different ways of coping with these issues¹².

5.1.1 France

The French health care system (HCS) is the combination of a Bismarckian approach at the structural level, mixed with a Beveridgian approach at the financial level. The HCS pursues universality and solidarity ¹³. Although the patient has the freedom to choose a GP and there is no compulsory gatekeeping system, the public health authorities are pushing towards a "médecine de parcours", to increase the efficiency of the overall system, to reduce the fragmentation and to provide health care in the closest setting of the patient. The "médecine de parcours" also called "parcours de soins coordonné" implies that the patient chooses a treating GP that will coordinate his/her medical care, centralises the medical record, refers the patient to other (specialist) health professionals, establishes the care protocol in case of chronic diseases (in collaboration with other professionals) and delivers a personalised prevention based on patient characteristics ¹⁴.



5.1.2 Scotland

The Scottish health care system is characterized by a high degree of accountability to the Scottish Parliament and by its financial accessibility, comprehensive free healthcare being available to people living in Scotland ¹⁵. The majority of NHS Scotland provision is paid for through general taxation. Since 1999, there is no more purchaser-provider separation, meaning that most of the primary care professionals have contracts with the NHS boards; these contracts fixing the terms of reimbursement. These last years, major reforms of the NHS Scotland supported the need for increased integration and collaboration, with a clear focus on local communities and the individualisation of the patient needs, the re-design of all public services around the needs of communities and people, and the implementation of a quality strategy. As part of these major (organisational) changes, health and social care are now integrated within the communities, improving the partnerships between local authorities and NHS. Primary care is then at the heart of the HCS, where the GP are included in multidisciplinary teams ¹⁵.

5.1.3 The Netherlands

The Netherlands are characterized by a health-system focusing on the demand side where three managed markets co-exist: universal health insurance package, healthcare purchasing and provision. These markets are consolidated by the insurers and the service providers while the public authorities endorse a supervisory role. In 2015, long-term care was reoriented, with a shift of responsibility regarding social care to municipalities. Besides, "extra attention is now being paid to integrated care for chronic diseases and care for people with multi-morbidities, and the shift of care to lower levels of specialization: from hospital care to GP care to practice nurse to self-care" (Retrieved from Kroneman et al., 2016, p XXV). A key organizational component is the existence of a gatekeeping system, meaning that patients need to be referred by a GP to access hospital care and specialist care (except emergency care)¹⁶.

5.2 Assessment of quality of health care in four countries: methodology

5.2.1 Scope of the literature search

This literature search had two main objectives:

- to describe how quality is assessed in the overall health care system and in the rehabilitation sector in France. Scotland and the Netherlands.
- to describe how health care is organised and its quality evaluated for 4 different health conditions: diabetes, haemophilia, stroke and female genital mutilations.

These health conditions were chosen as examples of the fourfold typology described in Chapter 4 (See Table 3 for an overview).

Table 3 – Typology of conventions applied to the selected health conditions

COTTAILLOTIS				
Type of convention	Example			
Conventions focused on providing classic rehabilitation services	Cardiac rehabilitation /stroke rehabilitation			
multidisciplinary care ('case management'	 All diabetes related conventions Haemophilia			
multidisciplinary diagnosis and support	-			
multidisciplinary counselling	Female genital mutilation			



5.2.2 Search process

The starting point of the literature search were the HIT country reports and the report on the management of chronic diseases of the European Observatory on Health Systems and Policies 12,13,15. Based on these reports, public institutions were identified and their websites were searched for detailed information. A snowball approach was used to enhance the scope of the literature search. As this literature search was focusing on the description of existing practices and policies related to quality evaluation and health care for specific conditions, we purposely excluded indexed databases as we were not interested in empirical researches.

All reports, reviews or webpages authored by official health (or social) bodies were selected. Documents had to be written in French, Dutch or English. Publication range was not predefined but we tried as much as possible to identify the latest published national plan or policies.

For additional data and clarification purposes, emails were sent to the contact persons mentioned on the institutions' website. The interviews with country experts for France and Scotland were conducted by video conferencing, and a face-to-face meeting was organised with an expert from the Netherlands. During these interviews, these country-experts were asked:

- to describe how the (national) quality plan was developed (who, how, why),
- how the quality indicators are selected, implemented and collected (on the field and at supra level),
- how the quality of the data collection is monitored,
- to explain the incentives / sanctions related to quality assessment
- to describe how indicators are made available to the users

References of the retrieved documents were stored in an EndNote database.

5.2.3 Analysis

In a first step, all documents were read and data were organised according to predefined criteria. Table 4 presents the criteria used to collect information on the rehabilitation programs in France, Scotland and the Netherlands.

Table 4 - Criteria used to collect data on rehabilitation programs

Criteria

Is there a convention / a program for the condition?

What is the general framework of care?

- How does the patient access health care?
- What are the access conditions?
- · What is the main service delivery model
- Are there specific target groups?
- What is the content of the convention/ what are the treatment components?
- How is the health care delivery organised/ how is the convention organised?
- Where is the care delivered?
- How is the care funded and by whom?
- (if possible) Example of a typical patient situation

Is there any evaluation of the program?

- Who is requiring the evaluation?
- Is the evaluation compulsory?
- Who participate to the evaluation?
- · What are the quality indicators
- What is the frequency of the evaluation?
- Which type of evaluation is it?
- Is the evaluation related to funding of the program
- Is there any evidence of efficiency of the program?



In a second step, a cross-comparison was made between the different countries based on the key functions of conventions emerging from the interviews with Belgian stakeholders:

- To provide a setting for the organisation and provision of multidisciplinary rehabilitation and care.
- To provide space for innovative, future-oriented practices that cannot be easily accommodated by the rigid nomenclature based system.
- To stimulate specialisation, concentration of expertise and networking.
- To enhance ease of financing.
- To provide patients access to low-threshold and affordable care.

For each country the overall organization of the rehabilitation sector is described in addition to the programs (if any) for the selected health conditions (i.e. stroke, diabetes, haemophilia, female genital mutilation).

5.2.4 Validation by country experts

The chapters on France, Scotland and the Netherlands have been reviewed by experts in the organization of health care in their respective country. Appendix 2 presents the full international comparison.

5.3 Cross-comparison of the quality evaluation

Internationally, quality of care has been acknowledged as a major concern for health care system and each country has developed its own system of evaluation. Table 5 presents the key dimensions of the generic quality evaluation in France, Scotland and The Netherlands, independently of a specific health service or health problem.



Table 5 – Key dim	ble 5 – Key dimensions of the generic quality evaluation in France, Scotland, The Netherlands and Belgium Countries included in the international comparison					
	France	Scotland	The Netherlands	Belgium		
Dimensions of qu	ality evaluation					
Responsibility	Haute Autorité de Santé (HAS): coordination of the national data collection on quality and safety indicators (IQSS) and on nosocomial infections (IAS) in all healthcare facilities.	Health Improvement Scotland (HIS): assessment of quality and safety and report on performance.	Health Care Inspectorate (IGZ): quality and accessibility of healthcare Dutch Health Care Authority: monitoring the proper functioning of the healthcare markets and the provision of proper care	FPS Public Health: national quality & safety plan NIHDI Zorginspectie, Flanders AVIQ, Wallonia IRIScare or COCOM, Brussels		
Available quality assessments	IQSS: measuring tools that are applied to a health status, a care practice or an event, allowing a valid measuring of health care quality and its variations in space and time, applicable at the level of health services (including patient experiences). Also used for planning health care policies at regional and national level; and to inform patients about the quality of care in health services	Quality assessment at macro / meso / micro levels aiming at improving the overall quality of the system (including patient experiences)	Patient experience, quality and performance indicators in general and specialised care	Quality assessment at macro / meso / micro levels aiming at improving the overall quality of the system (including patient experiences) but availability depends on the region of Belgium		
Role of health care providers in data collection	Data collection of indicators is compulsory: it is part of a legal obligation and is required for accreditation of the hospitals. Health care providers collaborate with the HAS by providing the data.	Depending on the indicators, data registration is collected by health care providers as part of the routine or by external evaluators. Participation to quality assessment is compulsory.	Most quality assurance is carried out by providers, sometimes in close cooperation with patient and consumer organizations and insurers. The Inspectorate is more closely monitoring care for vulnerable people like the elderly, for example by carrying out more workplace visits.	Depending on the indicators, data registration is collected by health care providers as part of the routine or by external evaluators. Data collection is compulsory.		
Development and selection of indicators	The HAS develops the indicators, mostly based on the requests from the Ministry of Health and the priorities in health policy, after	Health Improvement Scotland selects and develops the indicators based on available evidences and legal texts	Each health profession usually has its own organization, association, college or society to advocate for professional interests as well as to contribute to scientific development and quality,	 Indicators in the Flemish VIP² program are determined and refined by development groups, gathering mainly of 		

	discussions with an intersectoral steering committee	User's involvement being a major concern of the Scottish Government and of the NHS Scotland, patients and service users are regularly involved in the development of the quality approach.	including guidelines that may serve as template for the assessment of quality of care. The Health Care Inspectorate (IGZ), the Dutch Health Care Authority (NZa) and the Health Care Insurance Board (CVZ) develop indicators.	clinicians, quality coordinators and data specialists. Integreo Program: PROMS and PREMS indicators ^{17, 18} . Wallonia & Brussels: the development of indicators is currently managed by the PAQS. The final set will be communicated to the public authorities beginning 2018.
Recurrence of data collection	Every two years	Dependent on the type of indicators: yearly assessment, ongoing and variable assessment, regular assessment	Annual production of quality report, supported by a systematic data collection on the effectiveness, patient centeredness and efficiency of the provided care	Dependent on the type of indicators: yearly assessment, ongoing and variable assessment, regular assessment
Types of indicators and data collection	Structural indicators Process indicators, via patient health records + additional data from clinicians Outcomes indicators, via patient health records Patient satisfaction, self-reported by patients	Structural, process, outcomes and patient indicators via systematic registration and adhoc data collection Three distinct types of inspection: announced inspection, unannounced inspection and (un)announced follow-up inspection (for both NHS services and independent healthcare services (e.g. in the rehabilitation sector))	62 performance indicators to allow patients to choose their preferred supplier developed by the Dutch Health Care Inspectorate, completed by care providers. Set of performance indicators for each health insurer, completed by care providers Publicly reporting of approximately 115 performance indicators, covering 42 diseases, completed by the hospitals for the For the Dutch Health Care Transparency Program	 RHM FINHOSTA Quality of nursing care Indicators of hospital hygiene VIP² in Flanders: clinical, process and outcomes indicators Under development in Wallonia & Brussels
Assessment of the quality of collected data	The quality of some indicators is controlled by the regional health agencies, on the basis on a list provided by the HAS.	Independent bodies such as the Health Improvement Scotland and Care Inspector assess the quality of the data.	The Inspectorate analyses the data, correlates the data with other sources, validates the data by means of unannounced visits to health care institutions, compares health care institutions, and makes the information publicly available.	In the Flemish VIP², a Thrusted Third Party checks the reliability and the validity of the provided data and ensures that those accessing the data respect the confidentiality and the privacy of information. Ad-hoc controls are performed



Availability of indicators for public		Regulation of the publication of the indicators by a national decree. Availability of a selection of indicators to the public. Obligation of displaying the results for hospitals. Official website Scope Santé gathering quality assessment	Compulsory, all results related to quality of care are available to the public.	Publicly available information for consumer choice on waiting lists, patient satisfaction, and a few quality indicators, through a website of the Dutch Patient organization Availability of data collected by the Dutch Health Care Institute and the Dutch Health Care Inspectorate	•	Flanders: indicators and inspection reports are publicly available on the website of the Health & Care Agency. Inspection reports related to agreement are not available to the public in Brussels and Wallonia.
Participation the patients	of	Representatives in the steering committee developing the quality indicators.	Compulsory, representatives at various levels, collaboration with patient associations	Obligation of having a representative patient council in health care organisations. Representatives of patients in the purchasing decisions by health insurers No formal involvement in the quality assessment of the health care system	•	Indirect involvement through the patient organisations at least for quality assessments in Flemish general hospitals. In the Federation Wallonia-Brussels no clear evidence that patients are associated to the quality assessment although collaborations exist.
Incentives indicators collection	for	Inclusion of indicators in the quality- based pay-for-performance system (sanction of no data collection) Legal obligation for data collection of indicators, related to the accreditation of the hospitals.	Legal obligation for all service providers	Inclusion of the indicators in the funding of the health services.	•	Indicators measuring the activity of the health services serve as a basis for funding In Wallonia, accreditation is suggested to hospitals but not (yet) compulsory35

Key points

- Quality of care is targeted by national health policy plan.
- Assessment of the quality of care is piloted by a national independent body, usually in charge of the selection, the development and the analysis of the indicators.
- Results of quality assessments are made available to the public and are included in the funding mechanism of the health care services.
- Patient participation is not yet fully achieved although patient satisfaction and patient experience are increasingly developed in all investigated countries, Scotland being the more advanced in such process.



5.4 The organisation of care and financing of four examples of health conditions and diseases

The four investigated conditions were diabetes, stroke, haemophilia and female genital mutilation. Overall no system similar to the convention was found in the investigated countries, although France has a capitation-system based on the severity of the disease (except for FGM).

The following sections present a condensed view of the national situation. Full description can be found in Appendix 3.

5.4.1 In France

Table 6 - Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in France

		Health Conditions And Diseases							
		Diabetes	Stroke	Haemophilia	Female genital mutilation				
E	Elements of the health care system								
•	Supporting	None	National plan	National plan	None				
	policy								
•	Organisation	Care pathways	No specific program	Rare diseases Healthcare Network	No specific public program				
		Health networks		Reference centres for rare diseases					
		Support program		Competences centres for rare diseases					
		Interdisciplinary team in first line of							
		care							
•	Funding	Capitation based on the severity of the disease	Capitation based on the severity of the disease	Capitation based on the severity of the disease	Included in the regular funding system				
•	Patient	Representatives in several public	Representatives in several public	Representatives at local, regional and	None				
	participation	institutions	institutions	national levels					
	pao.pation	Diabetes Lab							
•	Evaluation	At GP level	Specific quality indicators	Evaluation of the national plan	None				



5.4.2 In Scotland

Table 7 – Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in Scotland

		Health Conditions And Diseases							
		Diabetes	Stroke	Haemophilia	Female genital mutilation				
Elements of the health care system									
•	Supporting	National plan	National plan	No specific plan	National plan (not only health				
	policy				aspects)				
•	Organisation	National steering group Managed clinical network	National Advisory Committee for Stroke (NACS)	Scottish Inherited Bleeding Disorders Network (SIBDN)	Unique model of interventions to be integrated in existing services				
		Integrated primary health care	Stroke managed clinical	Comprehensive care centres					
		team	networks	Haemophilia centres					
			Intermediate care services (rehab)						
•	Funding	Free at the entry point	Free at the entry point Intermediate care: depends on the service	Free at the entry point	Free at the entry point				
•	Patient	Representatives of patients in	Representatives of patients in various committees and advisory boards in the NHS Scotland	Representatives of patients in various committees and advisory boards in the NHS Scotland, specific working group for haemophilia	Representatives of patients in various committees and advisory boards in the NHS Scotland				
	participation	various committees and advisory boards in the NHS Scotland							
•	Evaluation	Included in the mainstream	Stroke charter	Ongoing evaluation by the SIBDN and Haemophilia Scotland	Obligation of collecting data on				
		quality assessment	Stroke Audit (public)		FGM in daily routine				



5.4.3 In the Netherlands

Table 8 – Organisation and financing of care for diabetes, stroke, haemophilia and female genital mutilation in The Netherlands

		Health Conditions And Diseases					
		Diabetes	Stroke	Haemophilia	Female genital mutilation		
E	lements of the health care	system					
•	Supporting policy	No specific plan for diabetes	No specific plan for stroke, included in the integrated care policy	Vision plan for haemophilia (1999) ³³	No specific plan		
•	Organisation	Multidisciplinary treatment teams in hospitals or diabetes centres.	Integrated care in collaborative networks of health and social care providers ³⁴ . "In 2006 the Stroke Knowledge Network of the Netherlands ("Kennisnetwerk CVA Nederland") was founded by professionals and coordinators in stroke care" ³⁴	Collaboration between the GP and specialized treatment centers (16 in the whole country)	Availability of care guidelines for health care professionals caring for FGM victims ¹⁹		
•	Funding	Included in the regular funding system	Included in the regular funding system	Included in the regular funding system	Included in the regular funding system		
•	Patient participation	Care standards are developed and updated by the Dutch Diabetes Federation (Nederlandse Diabetes Federatie (NDF), an umbrella organisation uniting patients, health care professionals and researchers	Dutch Heart Association	Nederlandse Vereniging van Hemofiliepatiënten: patient are associated in the development of guidelines for health care professionals and validated the quality standards for the haemophilia treatments centres ²⁰	None		
•	Evaluation	Included in the mainstream quality assessment	Assessment of the integrated stroke care service based on the Development Model for Integrated Care ²¹	Evaluation of the haemophilia treatments centres based on national quality standards ²⁰	None		



- Stroke, diabetes and haemophilia usually benefit from a specific health care organisation and delivery, motivated by the frequency, the need for a rapid management (especially for stroke), and the costs (mainly for haemophilia). Only Scotland has a specific approach for FGM, including national action plan, delivery model and data collection.
- Although conventions are unique to Belgium, the funding of health care is mainly based on a fix-paiement to improve access and affordability for the patients.
- Patient participation is unequally developed and depends on the health conditions. The existence of a well-organised and nationally representative patient association appears to be a support for the inclusion of patients in quality assessment, as it is the case for Scotland where patient representatives play a major role in quality assessment. Patient involvement is also related to the objectives of transparency and accountability and is much helped by the existence of legal rules putting them on the front stage.

6 TOWARDS A META-EVALUATION PROTOCOL

6.1 Approach and methodology

6.1.1 A soft systems-inspired approach

Methodologically we structured the investigation along the lines of Soft Systems Methodology (SSM)⁸. Soft Systems Methodology is a general, systemic problem solving approach. Its purpose is basically to organise a process of 'learning for action' in dealing with 'wicked problems' that are characterised by high technical and social complexity. So rather than trying to 'solve' these messy problems, the aim of SSM is to come to an agreement between people affected by the situation about what actions are desirable and feasible to bring about an improvement in the situation ²².

The application of SSM is structured in three steps that are ideally deployed in an iterative way so as to support a continuous learning process:

- Find out: identify and express the problematical situation;
- Systems thinking: develop conceptual models as a source of questions to ask of the problematical situation.
- **Taking action**: compare the conceptual models with the real-world problematical situation thus structuring a discussion about desirable and feasible changes to improve the situation.

In this research we did not deploy SSM in its full breadth. Rather we relied on the conceptual representations of systems that are part and parcel of SSM as a framework for the development of the evaluation instrument. The idea is that these models would serve as a basis for "the discussion about desirable and feasible changes" between financing authorities and professionals active within rehabilitation conventions. And this discussion was assumed to be at the heart of the evaluation process envisaged by the members of the Board of Medical Directors. In that sense the adoption of an SSM-inspired approach seemed wholly appropriate in the framework of this research project.

S 1 1 2 The use of a consensus activity model

Two conceptual tools from the systems thinking phase of SSM have been relied on in this research: root definition and activity model. We will proceed with explaining the rationale behind these two tools.

6.1.1.1 SSM concepts: 'root definition' and 'activity model'

We reiterate the point that Soft Systems Methodology is a generic problem solving approach to dealing with situations that are perceived to be problematic. Whatever the nature of the problematic situation. SSM assumes that it will be characterised by people trying to act purposefully. This pragmatic dimension anchors the systems concept that underlies the approach. In SSM 'the system' considered is not an organisational entity with a recognised boundary, legal status, resources and so on. Instead it is a 'Human Activity System'. Checkland defines a Human Activity System as follows: "A notional purposive system which expresses some purposeful human activity, activity which could in principle be found in the real world. Such systems are notional in the sense that they are not descriptions of actual real-world activity (which is an exceptionally complex phenomenon) but are intellectual constructs (...) for use in a debate about possible changes which might be introduced into a real-world problem situation." ²³p. 314). It is this pattern of purposeful activity that SSM endeavours to model. These conceptual models are labeled as 'activity models'. These models express what activities are being performed by people in pursuit of a given purpose and how these activities are logically interdependent. So the activity models do not describe the problematic situation but are relevant to it in such a way that they trigger a series of interesting questions. In sum: their value is heuristic rather than descriptive.

The purpose itself is encapsulated by a '**root definition**'. A root definition is a concise, tightly constructed description of a Human Activity System which states what the system is. It is a precise statement that takes the following generic form: "A system owned by O and operated by A, to do X by Y to beneficiaries C in order to achieve Z within constraints E." ²³(p. 317).

6.1.1.2 The use of a consensus activity model

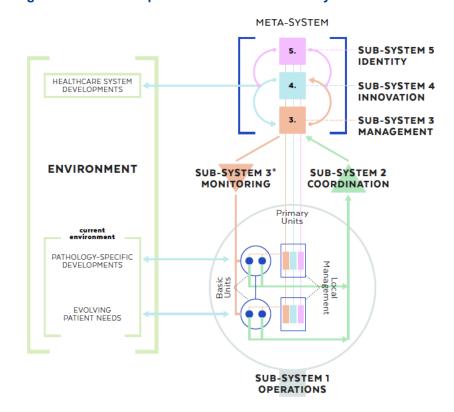
Within the SSM approach there are two divergent schools of thinking. Peter Checkland, one of the original developers of the methodology, assumes that any problematic situation will be perceived differently by people with distinct worldviews. Hence the need to develop multiple root definitions and associated activity models to make sure that variety of standpoints is taken into account and made explicit of the process of action research supported by SSM ²³. Inevitably, as a result of accounting for this multiplicity in worldviews, the process of comparing conceptual models with the real-world problematic situation risks to become more complicated and opaque. Brian Wilson, another SSM pioneer, takes a more pragmatic approach in allowing for the development of a consensus activity model that reflects a consensual understanding of the Human Activity System's governing purpose 24. It is that line of SSM practice that we have adopted in this research study. So, the ambition was to approach a 'convention' as a Human Activity System and to clearly articulate its guiding purpose as a consensus root definition. That would lead to the development of an activity model that supports this guiding purpose. Finally, we would identify a set of relevant performance criteria to guide the operation of the Human Activity System. These elements - consensus root definition, activity model and a set of performance criteria - would form the basis of the evaluation instrument sought by the NIHDI to assess the performance of conventions. Given the variety in real-world conventions we left open the possibility that eventually we would have to develop several activity models to account for these variations.



6.1.1.3 The use of the Viable System Model as template for a consensus activity model

Activity models can be developed inductively or deductively. An inductive approach starts from an inventory of activities that potentially contribute to a governing purpose. They can be based on brainstorms, interviews or real-world observations (always bearing in mind that the purpose of the models is heuristic, not descriptive). In a deductive approach the start is some generic conceptual model of a Human Activity System. Wilson, for instance, proposes a so-called Enterprise Activity Model that consists of four generic 'modules' that can be found in any 'enterprise' (i.e. any value creating entity) ²⁴. Here we relied on the Viable Systems Model (VSM) proposed by Stafford Beer to model any kind of organisation that is able to maintain a separate existence in a dynamic environment ²⁵. In other words, the VSM offers a generic description of an adaptive system.^c. A generic visual representation of the VSM is shown in Figure 4.

Figure 4 – Generic representation of the Viable Systems Model ²⁶



Note that Beer intended the model to be descriptive, but that in this research the VSM is used as a basis for developing activity models that are relevant to, not descriptive of a particular organisational reality (i.e. in this case: conventions).

There are three features of the model that we want to draw attention to:

- The constituent **functional modules** of the VSM: system 1, 2, 3, 3*, 4 and 5.
- The relationships facilitate the exchange of information and resources between these modules.
- The recursive nature of the model. That means that a viable system is contained by other viable systems, that can be modeled by an identical conceptual template. For instance, a convention may consist of different care providing institutions. In each of these institutions one or more multidisciplinary teams may be at work within the terms provided by the convention. Institution and team can be thought of as nested viable systems at adjacent recursive levels whereby the intitution provides a context for the team.

The architecture of a VSM consists of three main parts ²⁷:

- The **Operation** (also referred to as System 1, S1): these are the primary activities performed by the system.
- The Metasystem: these are the activities which ensure that the various Operational units work together in an integrated, harmonious fashion.
- The **Environment**: those parts of the outside world which are of direct relevance to the system in focus.

So, operation and Metasystem are tightly coupled 'internal' elements embedded in an 'external' environment. The Metasystem can be further divided into:

- The Conflict Resolution function (also referred to as System 2, S2): these are the activities that reconcile conflicting interests as parts of S1 interact.
- The Management function (also referred to as System 3, S3): these are
 the activities that regulate the Operation, determine its performance
 levels, decide on resources to achieve the desired level of performance.

- The Audit function (also referred to as System 3*, S3*): these are the
 activities that monitor the activities of S1 to help S3 perform its control
 function.
- The Innovation function (also referred to as System 4, S4): these are
 activities that are oriented towards the outside world. They pick up
 signals, interpret them and eventually turn them into meaningful
 information that may change the activities of S1 and S3.
- The Identity function (also referred to as System 5, S5): this are the
 activities that provide the ground rules and reflect on the system's
 governing purpose in the light of a changing environment and different
 interests of those parties affected by the general operation of the
 system.

The key functional modules are, in general terms, straightforward to identify in a company: S1 are the activities on the shop floor, S2 are the activities in the production unit's control room, S3 are the activities performed by executive management, S4 are the activities typically allocated to R&D or marketing, and S5 is the Board of Directors. In this research we used these generic functional modules as building blocks for a VSM-inspired activity model of a rehabilitation convention.

6.1.1.4 SSM(c) and SSM(p)

In section 1 we discussed the research question and drew attention to the fact that the aim of this assignment is not to answer the questions in the minds of the Members of the Board of Medical Directors, but to develop an instrument that would allow them to mobilise appropriate information flows to feed into their assessment. The distinction is reflected in an element of the SSM methodology, namely the distinction between SSM(c) and SSM(p). Checkland: "Normally SSM is thought of as a means of addressing the problematical content of the situation, which will include would-be purposeful action by people in the situation. It is that, of course. However, the practitioner is about to carry out another purposeful activity, that of doing the study, which is a task always associated with the practitioner role. Carrying out the investigation can be thought about, and planned, using models relevant to doing this. Thus SSM can be applied both to grappling with the content of a situation and to deciding how to carry it out." ²³ This distinction



is known as SSM(c) and SSM(p) - c for content, p for process. This research project operates in the SSM(c) mode. It produces a model, or a set of models, as the basis for an evaluation framework. But the actual carrying out of the assessment, relying on the framework derived from these models, could then be seen as an instance of SSM(p).

6.1.1.5 The structure of the research process

In line with the above we worked in four steps:

- **Step 1**: clear and unambiguous articulation of the guiding purpose of a convention in a root definition (section 3.1.1).
- **Step 2**: development of (a set of) activity models that support this guiding purpose.
- **Step 3**: identification of relevant performance criteria that reflect the human activity system's efficacy, efficiency, effectiveness.
- **Step 4**: putting these elements together in an evaluation framework.

6.1.2 Operationalisation of the approach

The research process was divided in four phases:

- Data gathering and research;
- Development of a prototype evaluation instrument;
- Stakeholder validation of the prototype evaluation instrument;
- Finetuning of the evaluation instrument in collaboration with stakeholders;

The research project ran from October 2016 to end of May 2017 (8 months elapsed time).

6.1.2.1 Data gathering: desktop research and interviews

Data was gathered through a combination of desktop research and stakeholder/expert interviews.

Desktop research

Very little academic or grey literature is available on the history and functioning of conventions. The contracts that stipulate the conditions under which a convention works were gathered by KCE researchers for all of the rehabilitation conventions included in the scope of this study. Early in the research project, an exploratory literature survey on concepts related to multidisciplinary care (MDC) and rehabilitation was done. With the help of Google Scholar, we searched for grey and scholarly English-language literature (November 2016) on the following topics: 'multidisciplinary care', 'integrated care', 'rehabilitation' and 'case management'. In an article on multidisciplinary care, it was argued that the terms multidisciplinary, interdisciplinary and transdisciplinary are ambiguously defined and interchangeably used ²⁸. Therefore we completed an additional search on 'interdisciplinary care' and 'transdisciplinary care' (February 2017). This early phase, cursory survey of the literature helped us to prepare for the stakeholder interviews.

Stakeholder interviews

A total of 26 interviews with stakeholders offered the main source of information in an initial phase of the research. All 26 interviewees had a privileged or expert view on how multidisciplinary care and rehabilitation for chronic and rare diseases is organised and on the contractual and operational specifics of NIHDI conventions. In planning the interview round a significant diversity in perspectives was sought, particularly from people who had first-hand experience with the clinical practice or financial management within conventions. In addition we interviewed people who had a more detached view as academic expert, patient organisation or member of the NIHDI Insurance Committee. Also two members of the Board of Medical Directors were included in the interview sample despite the fact that KCE had already interviewed them and four of their colleagues in a preparation of the research project. Notes and insights from these six



preparatory interviews with members of the Board of Medical Directors were also put at our disposal.

Representatives of the following subsections of the convention landscape were included in the interview sample:

- Clinical professionals (physicians and other health care professionals such as nurses and physiotherapists) working in centers that operate within a convention (both stand-alone centers and embedded in a larger hospital structure);
- Administrative directors of centers working within a convention;
- Care providers responsible for patient outcomes (social assistant, case manager);
- Financial directors at care provider;
- Representatives of centers working in 'outlying' conventions (i.e. abortion clinics, CVS);
- Representatives of care providers that unsuccessfully applied for a convention:
- Representatives of patient associations (Vlaams Patiëntenplatform, VPPd);
- Members of the Board of Medical Directors of the NIHDI:
- Representatives of the NIHDI Insurance Committee;
- Researcher in the field of Multidisciplinary Care (MDC).

The full list of interviewees is shown below.

Mr. Michel Caillau

Table 9 - List of interviewees (n=26)

Interviewee

Mr. Valère Akafomo Financial director CHU Liège Medical coordinator. Esneux revalidation Dr. Valérie Bartsch center, CHU Liège Mrs. Petra Berth Coordinating Nurse, Neuromusculair Referentiecentrum, UZ Gent Prof. dr. Bertien Buyse Pneumologist, UZ Leuven Mrs. Micheline Bon Head of kinesitherapists. Esneux Revalidation Centre, CHU Liège Researcher Chronic Care, Department Prof. dr. Liesbeth Huisartsengeneeskunde VUB Borgermans Dr. Jean-Pierre **Board of Medical Directors** Bronckaers Head of unit, gynaecologist, CHU Saint-Prof. dr. Martine Caillet Pierre Brussels 'CeMAVIE' Therapeutic coordinator, Clairs Vallons, Ottignies Financial director AZ Sint-Lucas & Mr. Bart De Bock Volkskliniek Gent Chief Physician, Clairs Vallons, Ottignies Dr. Carine De Buck Chief Physician, Zeepreventorium, De Haan Prof. dr. Ann De Guchtenaere Mr. Philippe Duval Paramedical coordinator, Cliniques de Europe, Uccle Head of Clinic Haematology, UZ Antwerp Prof. dr. Alain Gadisseur Prof. dr. Michelle Hall Convention Coordinator, HUDERF, Brussels Head of Centre, Children nephrology, Prof. dr. Khalid Ismaeli HUDERF, Brussels

Affiliation

The Ligue des Usagers des Soins de Santé (LUSS), the francophone counterpart of VPP, declined to contribute to this research.



Mrs. Els Meerbergen	Vice-Director, Vlaams Patiëntenplatform,
	Leuven
Dr. Marc Moens	Chairman Vlaams Artsensyndicaat
Dr. Frank Nobels	Head of service Endocrinologie-Diabetologie,
	OLV Aalst
Prof. dr. Philippe	Psychiatrist, Universitair Psychiatrisch
Persoons	Centrum KULeuven
Mr. Rudi Reyntjens	General Director, Zeepreventorium, De Haan
Prof. dr. Camelia Rossi	Infectiologist, CHU Ambroise Paré, Mons
Mrs. Chantal Seret	Administrator, Cliniques de l'Europe, Uccle
Mr. Bart Thomas	General Coordinator, Neuromusculair
	Referentiecentrum, UZ Gent
Dr. Chris Van Hul	Board of Medical Directors
Mrs. Ilse Weeghmans	Director, Vlaams Patiëntenplatform, Leuven
	

The interviews were set up as semi-structured interviews, taped and transcribed (See Box 1). Three analysts of the contracting research team were involved.

In conversation with medical professionals and administrators care had to be taken to carefully explain the rationale behind the research. They had to understand the interview did not take place in the context of an evaluation directed by the NIHDI but contributed to a research project led by KCE.

Box 1 – Questions included in the interview agenda

- What is the purpose of rehabilitation conventions?
- How did the convention within which you are working emerge?
- What is the aim or ambition of the convention? How does it support the provision of good quality care?
- Does the care concept that is embedded in the convention reflect well the practice of your team? What are from your point of view the relative strengths and weaknesses of the convention?

- How does care provided within the framework of the convention differ from nomenclature-financed care? How do they interact? What is your relationship with services that do not operate under a convention?
- How do you monitor quality? How do you interact with the NIHDI?

In essence in the interview we wanted to understand our interlocutors' perceptions on the aim, functioning, relative strengths and weaknesses of the convention within which they had been working. The interviews with more distant observers or stakeholders focused primarily on their view on conventions' aims, strengths and weaknesses.

The interview transcripts were subsequently coded by three analysts but relying on a fixed set of codes. The codes were organised in the following thematic groups:

- Purposes of conventions
- System level conventions
- System level NIHDI
- Strong points conventions
- Weak points conventions.

The full list of codes is available upon demand.

6.1.2.2 Development of a prototype evaluation instrument

As data from interviews became available, the SSM-guided analysis as discussed in section 3.1 unfolded.



6.1.2.3 Stakeholder validation of the prototype evaluation instrument

The prototype instrument was presented to 16 stakeholders and discussed in a validation workshop (9 March 2017). Participants included mainly (but not exclusively) clinical professionals who had been involved in the interview campaign (see section 3.2.1.2). A list of participants is included in Table 9. The aim of the workshop was to share the insights from the interviews, explain the rationale behind the design process, invite stakeholders' reflections on the proposed evaluation instrument and offered stakeholders the possibility to suggest improvements. More details on the structure of the workshop and the resulting insights are in section 5.2.

6.1.2.4 Fine-tuning of the evaluation instrument

The prototype instrument was fine-tuned and polished in collaboration with four clinical professionals. The aim was to make sure that the instrument reflected the specificities of different types of conventions. As a result of that input the evaluation instrument was consolidated.

The research process is summarised in Table 10.

Table 10 - Key steps in the research process

Activity	Format	Questions
Preliminary data gathering and research	Interviews with members of the Board of Medical Directors.	What are concerns related to the workings of conventions? What aspects of their operation need to be evaluated?
Data gathering	Interviews with 26 stakeholders; desktop research.	What are concerns related to the workings of conventions? What aspects of their operation need to be evaluated?
Development of a prototype evaluation instrument	Analysis of data gathered.	What evaluation instrument is able to support financing authorities in managing conventions and medical

		practitioners in providing care within conventions?
Stakeholder validation of the prototype evaluation instrument	Custom-designed 3 hour (1/2 day) workshop	What are stakeholder perceptions with regard to the proposed instrument? How can it be improved?
Fine-tuning of the prototype evaluation instrument	Face-to-face work sessions with clinical practitioners working in different convention settings.	How can the prototype instrument be adapted to reflect the specificities of different types of conventions?

6.2 Findings

6.2.1 Root definition of a rehabilitation convention

Key in our research strategy is the development of a 'root definition' of a rehabilitation convention. As discussed in section 3.1 this is a concise, tightly constructed description of a Human Activity System which states what the system is. It is the basis for constructing an activity model with associated measures of performance.

Based on stakeholder interviews and a study of the convention contract documents we propose the following:

"A convention is a system governed by renewable contracts | overseen by the Board of Medical Directors and mandated by the Insurance Committee | to develop, manage and operationalise tailor-made, multidisciplinary care and rehabilitation programs | operated by skilled clinical professionals and technical experts | for the benefit of specific patient groups | functioning within governing financial and political constraints and complying with the highest applicable standards of professionalism and scientific evidence."



- The overarching, generic purpose of a convention: to develop, manage and operationalise tailor-made, multidisciplinary care and rehabilitation programs.
- The beneficiaries of the convention: for the benefit of specific patient groups.
- The actors involved in realising the purpose: operated by skilled clinical professionals and technical experts.
- The 'owner' of the system: overeen by the Board of Medical Directors and mandated by the Insurance Committee.
- The rules that govern the operation of the convention: *governed by renewable contracts.*
- The constraints within which the system is functioning: functioning within governing financial and political constraints and complying with the highest applicable standards of professionalism and scientific evidence.

The root definition has been shared with and discussed by stakeholders (see section 5.2) and by members of the Board of Medical Directors (section 5.3) and was felt to be an accurate and helpful statement.

6.2.2 VSM-based activity models

Based on this root definition we proceed with the development of an activity model for the human activity system 'convention'. The root definition expresses what the key purpose of this system is: to develop, manage and operationalise tailor-made, multidisciplinary care and rehabilitation programs. The activity model shows what activities are necessary to realise that purpose and how they are interconnected. In section 3.1.2 and 3.1.3 we discussed how we would rely on the Viable Systems Model as a template for this activity model. This is arguably a very generic model but it has considerable heuristic power. In section 3.1.3 we discussed how the VSM consists of three main elements — Operations, Metasystem and Environment. The Metasystem was further divided into five functional

modules: Conflict Resolution (S2), Management (S3), Audit (S3*), Innovation (S4) and Identity function (S5). We have also pointed out the recursive nature of the VSM. Now we will proceed with contextualising the VSM within the Human Activity System 'conventions'. The model will be elaborated at two recursion levels:

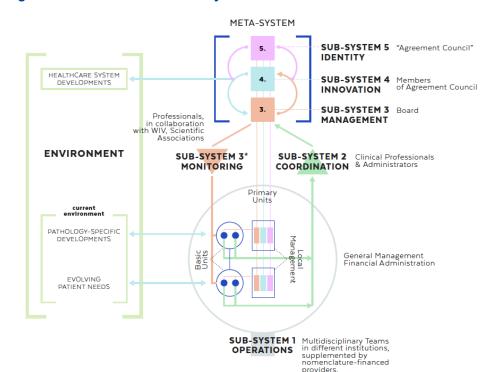
- At the level of a given convention, i.e. at the level of a cluster of care
 providing institutions that are financed through a given contract with the
 NIHDI and provide a volume of services for a specific target group in
 return.
- At the level of the NIHDI, i.e. at the level of the governance of the whole landscape of conventions.

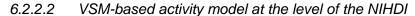
6.2.2.1 VSM-based activity model at the level of a convention

We contextualise the basic functional modules at the level of a convention based on the input gathered from the interviews (see 3.2.1.2).

- Operations: this is the level where multidisciplinary care and rehabilitation programs are operationalised, i.e. this is where the care is provided to patients. Within the framework of a convention this process can be guided by a care model that is included in the contract with the NIHDI. The programs are operationalised by multidisciplinary teams of medical and paramedical professionals (and also the team's minimal composition is prescribed by the contract). However, in many cases patient needs will not only be met by the services that can be offered within the convention. Clinicians have to be creative to meet the ever varying needs of patients. Often they will have to combine convention-financed and nomenclature-financed care to do so. The Operations' local management is provided by the general management and financial administration of the institutions that are signatories to the convention.
- Conflict resolution: these activities contribute to a conflict free atmosphere and enables the operational units that make up S1. This is a shared responsibility of clinical professionals with leadership functions (team leaders, department heads) as well as administrators in care providing institutions.

- Figure 5 The VSM-based activity model at the level of a convention
- Management: a convention is managed by the Board of Medical Directors of the NIHDI. The Board is supported by a modestly-sized technical unit (< 10 FTE and likely significantly less; exact data are not available as analysts have duties related to several areas).
- Audit: in principle this is a shared responsibility of professionals and the NIHDI. Care providers working within a convention are bound by reporting guidelines drawn up by the NIHDI. They may collaborate with other actors – such as scientific associations or research institutes – to support these reporting activities.
- Innovation: in principle a convention leads to the establishment of an 'agreement council', populated by members of the Board and by representatives from the care providing organisations that are signatories to the convention. The agreement council provides a forum for periodic exchange of information on the workings of the convention, and on the need to revise it based on developments in the wider healthcare system. This is the place where innovations are introduced into the convention system. Obviously, relevant signals (from the environment and/or the shop floor) can be picked up anywhere in the convention system.
- **Identity**: this crucial function defines the rules and purpose of a given convention and assesses its utility in the broader healthcare landscape. We can assume that this is a shared responsibility of the Board and the agreement council that is associated to a particular convention.
- Environment: Practitioners in S1 are exposed to evolving patient needs and pathology-specific developments. The wider environment in which a convention is embedded in principle encompasses the wider healthcare system.





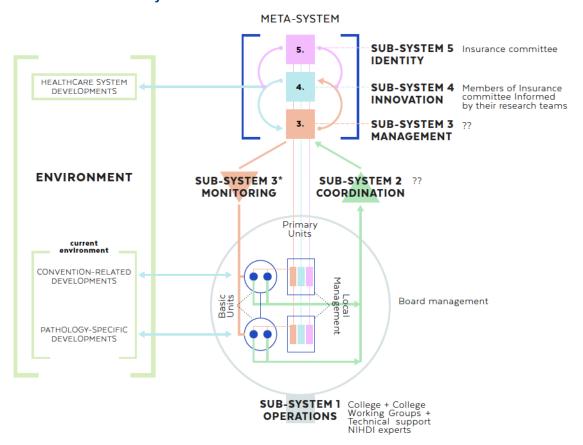
We exploit the recursive nature of the VSM and proceed with contextualising a VSM-based activity model at the level of the NIHDI. Therefore, this recursion level covers the governance system of the rehabilitation convention landscape.

- Operations: at the higher recursion level the operations are fulfilled by the Board of Medical Directors, either working as a plenary meeting or in working groups. Also the technical unit and any other NIHDI experts that give input to the operations of the Board are part of S1. The Board's work is based on a very labour-intensive consensus model.
- Conflict resolution: we have been unable to verify exactly how this
 function works at the NIHDI level. However, during this research project
 we had first-hand experience of the Board members' charged agendas.
 They have many responsibilities, are able to meet only about 6 hours
 per week to deal with convention matters and have a relatively small
 technical unit to support them. Likely 'conflict resolution' is done ad hoc,
 by constantly juggling agendas and resources, requiring a lot of
 personal commitment and flexibility of Board members and supporting
 staff.
- Management: the general management function at the NIHDI is taken care of by the General Council and the Committee for Health Care Insurance ('Insurance Committee'). The latter closes the agreements (conventions) with the rehabilitation centres, and suggests a global budget objective and its breakdown into partial objectives. The General Council formally decides on these budget objectives. For practical purposes we can assume that the Committee for Health Care Insurance is de facto S3. However, this 'Insurance Committee' works in a negotiation mode as it is composed from an equal number of representatives of the sickness funds and the care providers. Social partners have an advisory role in the committee.

- **Audit**: likely the audit function that extracts information from S1 at this recursion level has a very limited, financial scope.
- Innovation: there is no formal 'innovation' unit embedded within the NIHDI that feeds the Board with ideas and impulses for establishing new conventions or changing existing ones. This is a shared, informal responsibility of the Board, supported by their technical unit, and the Committee for Health Insurance, the members of which can rely on internal research teams and/or their exposure to environment.
- Identity: the overall policy regarding conventions is set by Committee for Health Insurance in tandem with the General Council and the Minister of Public Health.
- Environment: the environment at this recursion level encompasses epidemiological, institutional and political developments in the wider health care system.

ď

Figure 6 - The VSM-based activity model at the level of the NIHDI



The discussion of these VSM-based activity models gives us a better grasp of how the convention landscape works. We now turn to a discussion of the measures of performance that can be operationalised at the level of a convention.



We repeat that the core purpose of a convention, expressed by the root definition is 'to develop, manage and operationalise tailor-made, multidisciplinary care and rehabilitation programs'. This overarching purpose is now unbundled in three secondary 'transformations'. We propose that a convention can be thought of as aiming to contribute to performance improvements at three levels:

- A patient-level transformation, leading patients with complex health needs and suffering from a chronic condition to function better at home in school, in the community and throughout life.
- A service-level transformation, leading to rehabilitation and multidisciplinary care services and supports that are coordinated and efficient.
- A system-level transformation, leading to conventions that are evidence-informed, needs-oriented, resilient, capable to deal with the evolving requirements and needs of contemporary society and developments in the wider healthcare system.

At each level we now define generic measures of performance:

- For the patient-level transformation, the operation of the convention system is based on criteria of effectiveness, i.e. improved clinical outcomes and improve functional outcomes.
- For the service-level transformation, the operation of the system is based on criteria of efficiency, i.e. the degree to which the system functions within human, financial and infrastructural resource constraints.
- For the system-level transformation, the operation of the system is based on criteria of ethicality, professionalism and adaptiveness, i.e. the degree to which the convention adheres to the value base (needs oriented, patient-guided), the degree to which the system incorporates best available evidence, and the degree to which the system is able to learn and evolve with changing demands.

6.2.4 Perceived strengths and weaknesses of conventions as a financing and operational instrument

6.2.4.1 Perspective of the Board of Medical Directors

During the scoping of the project KCE researchers interviewed 6 members of the current Board of Medical Directors, including the president, and the former president, to get the subject tangible and clarify their demand. Below the insights from the interviews related to the members' perceptions of conventions' strengths and weaknesses as a financing instrument are summarized.

Strong points

The key advantage of this financing instrument is flexibility, allowing creative and innovative ways to organise care. This plays out at different levels:

- Rehabilitation conventions have been developed in order to finance care - mostly multidisciplinary care - that did not fit within the system of fee for service, as foreseen in the nomenclature.
- Conventions enable the NIHDI to tailor conditions and make agreements about content of care, composition and formation of the staff, and also prices.
- Conventions also offer procedural and administrative flexibility in the sense that they allow for the allocation of financial resources without passing through a Royal Decree.
- Conventions create opportunities for non-licensed health care professionals, who can be part of the staff of rehabilitations centres financed by conventions.
- Conventions are a pragmatic device to (at least temporarily) compartmentalise potentially rapidly escalating costs in health care.
- Conventions facilitate creative and innovative ways to organise multidisciplinary care. Care providers have the freedom to implement their ideas about how to serve their patients best.



Weak points

Absence of an overarching vision

An overarching vision about what conventions should achieve, their role in the health care system, the programming of care and how the conventions should fit together is absent. Conventions are developed ad hoc. There is no general procedure. Health care organisations or institutions can submit a proposal. Sickness funds can take initiative, but also ideas for new conventions can originate from within the Board of Medical Directors or within the agreement councils. Hence there is no global plan, vision or framework. The flexibility of the financing instrument (in comparison with the nomenclature) has led it to be used for financing very different care practices, not only oriented towards rehabilitation but also to other forms of multidisciplinary care and counselling. As such the original focus was subject to considerable drift.

Supply-driven

As a rule conventions are shaped in negotiation with the care providers. As a result they are to a significant degree tailored to the needs the institutions providing care. Patient input is not (or not explicitly) taken into account. Basically conventions are supply driven. The actual care provided is to an extent standardised. A certain number of sessions is foreseen for all the beneficiaries of the convention, but it is unclear whether this number corresponds to patients needs on an individual basis. For some patients this standard number may be too much. However, whatever their needs patients can claim the maximum number of sessions. Others may be underserved or withdraw before all sessions have been consumed.

Geographic imbalances

The Board endeavours to program conventions in such a way that they are more or less evenly distributed over the territory. However, in practice this proves to be difficult. As a result, rehabilitation centres are unevenly dispersed over the country as the result of historic developments. In some areas patients have to travel long distances. Long distances are not so much of a problem for reference centres, since patients go there only once or a few times a year for follow-up,

but in centres caring for patients on a daily or weekly basis long distances are problematic.

Weak incentives for quality control

It is difficult to monitor the quality of care provided within conventions. To an extent this has historical grounds. The oldest conventions date from the eighties and early nineties. They were developed in a completely different societal context. The aim was to create easily accessible care with minimal co-payments and a simple invoice consisting of lump sums. The financial climate was more generous and for some conditions (for example AIDS, sudden death syndrome among infants) there was a clear sense of urgency. In this context conventions were created with very little and vaguely formulated quality controls. Some early contacts are even black boxes: the text does not specify the actual activities of the centre. Apart from the outdated conventions, also in relatively new or renewed conventions incentives for therapy compliance, efficiency and data registration are lacking. Result commitments are not included. Conventions do not define outcomes. Quality of care largely depends on the good will and professional pride of the individual health care provider. Most conventions offer NIHDI the possibility of organising control visits, but in actual practice this rarely happens. Finally, 'soft', qualitative outcomes (typical for rehabilitation care) are difficult to measure, especially over longer periods of time. It is hard to keep in touch with patients and incentivise them to continue to share information. The more time has passed between treatment and the collection of patient input, the less patients are inclined to cooperate.

Weak enforceability of adherence to convention requirements

In practice it is hard to check whether care providers work to the letter of given convention. For instance, providers may tweak patient applications so that they meet acceptance criteria laid down in the convention. In a similar vein hospitals may set up unofficial collaborations with other hospitals in order to reach the minimum number of patients put forward by the convention. The collaborative networks between care providers are hard to grasp for the NIHDI. Hence it is also difficult to assess to what extent a convention really leads to a concentration of clinical expertise.



Lack of integration with the wider health care system

The rehabilitation conventions are not embedded in a network of care. By consequence, there is no systematic collaboration between sectors, e.g. rehabilitation centres, day care centres, and assisted living centres. There is no systematic transfer or switch after rehabilitation to other suited institutions or care programs. In some regions aftercare is even completely non-existent, which causes patients to linger in a rehabilitation centre.

The role of the rehabilitation conventions within the whole system of health care and welfare is unclear. In the best case, people go back to individual health care providers (e.g. physiotherapists) for follow-up once their rehabilitation program was terminated.

Lack of leverage to realise efficiency and savings

Financing includes different elements over which the Board has little control.

- Equipment (e.g. medical devices) is also problematic, because the NIHDI cannot buy directly from producers. The centres buy equipment and the NIHDI reimburses. However it is unclear which price the centres pay for the equipment. Mostly they negotiate a lower price, while the NIHDI pays the official price to the centres.
- Transportation costs are reimbursed for children and for wheel chair dependent patients for unlimited distances. Patients living far away from the centre cost potentially more for their transportation than for their treatment.
- For buildings NIHDI pays the rent, but also the purchasing price. In the latter case buildings are amortized after 33 years and then become the property of the centre, not the NIHDI. This way a patrimony can be built at the expense of the NIHDI.

 Finally, each convention includes also supporting services such as cleaning and secretary work. Hence for the large institutions bundling a series of conventions, these costs are paid for each convention to the same institution.

Uncompetitive wages for physicians

Physicians are not well payed within conventions. They earn much more in a fee for service setting, such as a private practice. As a consequence positions of physicians with specific specializations remain vacant or a physician with another less appropriate profile is adopted, against the terms of the convention. Another way to circumvent the low wages is to appoint a physician with a profile as prescribed by the convention, but with reduced availability. For example, while he/she should be available and is paid for 4 hours, he/she is only available for 2 hours.

Lack of management capacity within the Board of Medical Directors

The Board is severely limited in its capacity to manage and update the existing portfolio of conventions. They have approximatively 6 hours per week available for Board meetings. The supporting unit in the NIHDI is also relatively small (less than 10 FTE and in practice much less). In addition, initiating a new convention is a time-consuming process. All in all the Board has very limited management capacity.

6.2.4.2 Perspective of stakeholders

Strong points

Distinctive setting for multidisciplinary care

Care providers are on the whole very positive about conventions as a financing mechanism. A convention creates a setting that is much more conducive to providing multidisciplinary diagnosis, care and counselling compared to nomenclature financing. The ability to work in multidisciplinary teams focused on complex or rare diseases or patients with multi-morbidity is seen as a major plus by clinicians and paramedical workers. It leads to better quality care, more



knowledgeable staff and a better patient experience. In revalidation settings care can take a truly holistic form, involving all aspects of functioning in daily life. The ability to anticipate and intervene in this wider setting is felt to be invaluable by professionals. This point was reinforced again and again in the conversations with stakeholders.

Therapy compliance

Clinicians observe significantly higher levels of therapy compliance with patients that receive care within a convention. The requirement that patients are seen at regular intervals (even if it is only once per year, but over a long period of time) evinces the longitudinal character of treatment and creates an obvious clinical dividend in dealing with severe chronic conditions. Often these treatments also prevent patients from developing more serious conditions which would require more expensive and specialized care. Compliance is also enhanced by the integration of education activities in convention care packages. This creates a setting in which patients (or informal care providers such as parents) are more confident to ask questions, gain health literacy and enter in a co-productive relationship with care providers.

Flexibility

Professionals consider flat fee financing as a distinct advantage when working in settings where patient needs vary considerably. The ability to even out expenses over a larger group of patients within a given window of time creates opportunities for tailoring care paths to individual needs. Managerially speaking this becomes then an exercise in compensating the extra expenses related to care-intensive cases with less intensive cases. Administrators and professionals also appreciate the clarity and predictability that comes with a convention-based financing package. Many are also convinced that it is cheaper compared to nomenclature based financing.

Weak points

High administrative burden

Clinicians, paramedical professionals and administrators have grave concerns about the administrative burden that is associated with working within a convention. Already in nomenclature-based care, administrative duties are perceived to be heavy. In conventions this is experienced as a very significant burden which is felt to claim resources that would be better used to support practitioners' core business, i.e. providing care. Medical professionals experience little support and/or understanding from the side of the NIHDI.

Tight financial package

Care providers appreciate the predictability and flexibility of the financial package but in many cases feel it is so tight that it requires considerable ingenuity and goodwill to make the convention work within these financial parameters. There is a feeling that a budgetary logic prevails in the management of conventions. Administrative duties and reporting requirements are as a rule not compensated despite the considerable and increasing resources absorbed by these activities. The provision of multidisciplinary care is also highly differentiated and on a regular basis requires interventions and supports that are not provided for by the convention. Care providers also mention that socio-psychological support, counselling and educational activities are often insufficiently compensated. Fees are not calibrated to provide the necessary care for very care-intensive patients. Whether this leads to a practice of selectively choosing less care intensive patients ('cherry picking') has not been confirmed in the interviews but there is an obvious risk that it does. Finally, clinicians working within a convention have to make do with a much lower level of compensation than they might earn in a private practice.

Stringent admission criteria

Conventions target specific patient groups and include precise admission criteria accordingly. However, these criteria are sometimes seen as too selective or not corresponding to the clinical reality on the ground.



Bricolage/motivation/recruitment

Clinicians, paramedical workers and administrators feel they have to be very creative to provide a high standard of care within the setting of a convention. Tight financial resources, considerable administrative burdens and strict reporting guidelines, stringent admission criteria and the care-technical prescriptions embedded in conventions inevitably cause friction with the unruly reality on the ground and complex needs of patients suffering from chronic conditions. This requires practitioners and administrators to engage in 'bricolage', mixing various resources at their disposal. They rely on varying mixtures of convention-based and nomenclature-based finances to achieve their goals. Care providers in large institutions (academic hospitals) have in that sense more degrees of freedom. While for care providers this is to a degree a reality they have learned to live with, it is a state of affairs that exerts a constant pressure and risks to erode their motivation.

Lack of data integration

Reporting of activities and quality indicators in conventions is time consuming and burdensome affair. Very often this is still paper-based. Adequate IT support is missing. Clinicians receive little or no feedback on their reports. There is in some cases also considerable uncertainty about what the NIHDI exactly expects. Data from different centres are, as a rule, not aggregated and integrated and neither are they shared with institutions that are part of a convention. An exception are a limited number of conventions that have invested in setting up their own quality monitoring system in collaboration with the ISP-WIV and/or professional associations.

Lack of integration in other care services

It is an open question for many practitioners how conventions will adapt to the broad movement towards integrated care. Links with prevention, primary care and other specialised care services is not structurally built into conventions.

Unilateralism of the NIHDI

Once a convention is active care providers feel they have very little impact on key aspects of the convention's working. They resent the perceived unilateralism of the Board of Medical Directors. For instance, decisions to impose additional reporting requirements are communicated without prior consultation. Clinicians rarely receive feedback on their activity reports. The lack of communication comes with an annoying feeling of disempowerment and uncertainty.

Dysfunctional agreement councils

Formally the establishment of an agreement council is part of a convention. The agreement council assembles representatives of the Board of Medical Directors and the care providers working in the convention. Its aim is to provide a forum for a bilateral discussion about the workings of the convention and measures to improve quality. Some interviews in the framework of this research confirm that an agreement council is a powerful vehicle for progressive development and adaptation of a convention in response to emerging therapeutic opportunities. However, very often this seems not to be the case. Many of our interviewees reported that agreement councils met very irregularly, if at all. In some cases it had been over 10 years since an agreement council had been called. A number of care providers didn't even know an agreement council existed. Obviously the dysfunctions in the workings of agreement councils contribute to the perceived unilateralism of the NIHDI.

Lack of transparency

Related to the previous two points there is a widely shared feeling that the workings of the whole convention landscape suffers from a lack of transparency. Already the emergence of a convention (with the delineation of its scope, the decision on its operations and the selection of participating care providing institutions) is seen as an opaque process that is guided by lobbying and political motives. Once a convention has been established the perception of opaqueness lingers. Discussions within an agreement council do not always lead to decisions that could logically be seen to follow from these exchanges. There is a suspicion that financial packages differ between care



providing institutions within the same convention. Care providers also notice that the Board of Medical Directors is not free from conflicts of interest with members also representing the interest of sickness funds. Also institutional representatives of care providers within the NIHDI's Insurance Committee are frustrated by the lack of transparency that plays out in certain decisions regarding conventions. As the Board is the only NIHDI committee without institutional representation of care providers they argue for more accountability and greater transparency in its working.

6.2.4.3 Trust: a crucial variable

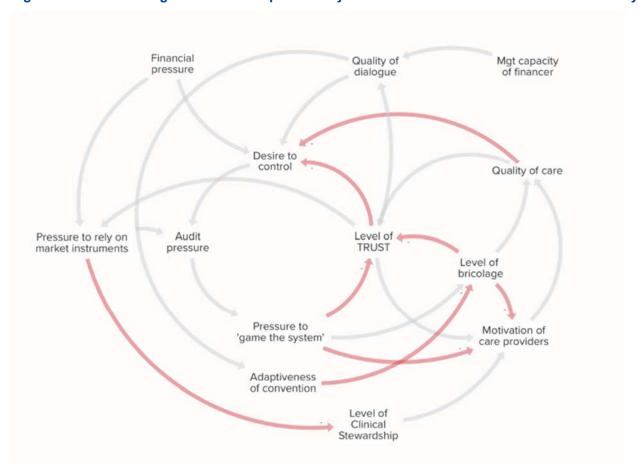
From the inventory of strong and weak points it transpires that conventions as a whole are seen to be a very valuable instrument in supporting high quality multidisciplinary diagnosis, care and counselling for patients suffering from complex and chronic conditions. However, a climate of distrust pervades the functioning of the conventions on the side of both professionals and financing authorities. Practitioners and administrators lament the lack of transparency in the governance of the convention landscape and they criticise the unilateralist management style of the NIHDI. The Board itself is frustrated by its lack of leverage over efforts to increase quality and efficiency. Hence the request for the development of an evaluation instrument. Given the absence in many conventions of functioning agreement councils, we may hypothesise that this climate of distrust could progressively deepen, leading to all unwanted consequences qua performance of conventions.

Shown below is an influence diagram (Figure 7) that further develops this hypothesis. The boxes in the diagram are variables (that can vary over a scale) and the arrows suggest causal linkages between these variables (a blue arrow denotes 'adds too' and a red one 'subtracts from').

Figure 7 shows how the level of trust in the broader 'conventions system' (including clinical professionals, administrators and the Board as governing body) is subject to the effects of interlocking reinforcing loops. Erosion of trust between those governing the conventions and those doing the work on the ground increases the desire to control and hence the audit pressure on clinical professionals. This increases the pressure to 'game the system' by frontline workers which further decreases the level of trust. Professionals derive little satisfaction from gaming the system (with the needs of the patients in mind) and so also their motivation as care providers goes down. This may compromise quality of care and this may fuel the desire to control from the governing bodies. The desire to control is also heavily influenced by exogenous factors, i.e. the available financial resources, and the quality of 'dialogue' between governors and administrators. 'Dialogue' is shorthand for 'contextualised management information' (in contrast with reams of paper with lots of numbers that hardly anyone reads). A constraint here is the management capacity available to the governing body. From the interviews we learned that this is limited indeed. A final set of connections runs from financial constraints to the pressure to introduce market mechanisms to the erosion of 'clinical stewardship' 29, and onwards to motivation of care providers. The systems map effectively contains the dynamics discussed (and condemned as ineffective) in Iles' report 'Why reforming the NHS does not work' ²⁹.



Figure 7 - Influence diagram that shows potential dynamics of trust in the broader 'conventions System'



6.2.5

Management: the Board I

VSM-based activity models

We can now look at the perceived weaknesses of conventions through the

Perceived weaknesses of conventions contextualised in the

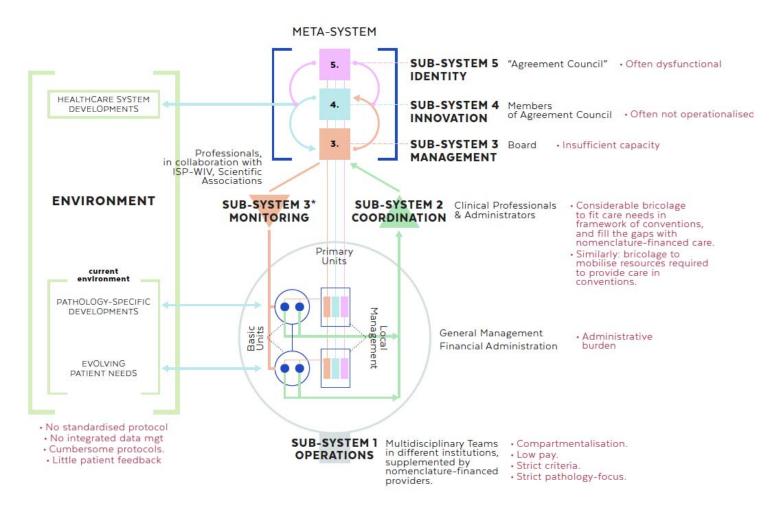
lens of the VSM-based activity models introduced in section 6.2.2. The insights are summarised in Figure 8 and 9.

6.2.5.1 At the level of a given convention

- Operations: professionals welcome the flexibility provided by conventions in organising multidisciplinary care. However, lack of integration with care facilities beyond the boundaries of the convention is a weak point. Also the low pay and the strict pathology-focus of a convention are considered to be sub-system 1-related weak points by some stakeholders. Administrators and professionals complain about the significant administrative burden associated to working in conventions.
- Conflict resolution: typical for sub-system 2 in a convention setting is
 the high level of bricolage reported by professionals. Bricolage serves
 to fit complex care needs in the framework of conventions and fill the
 gaps with nomenclature-financed care. For many professionals this is a
 way of life they have learned to accept and work with. Nevertheless it
 remains a source of stress and concern.

- Management: the Board has only limited capacity to attend to existing conventions. Sub-systems 3 is therefore only weakly developed.
- Audit: the same applies to the audit function. Each convention stipulates a reporting protocol, but as a rule the data remain scattered and are rarely acted upon. On-site audits are very rare. In some cases a more elaborate quality control approach has been developed in collaboration with other actors (research institutes, professional associations).
- Innovation: sub-system 4 is as a rule only weakly developed. It may exist but then its impact remains limited to the local level (within a given care institution). Agreement councils, a key instrument in ensuring the adaptiveness of a convention and diffusing best practices, are often not functional or operate in a perfunctory way. There are a few counterexamples where the effectiveness of agreement councils in supporting convention-wide innovation is demonstrated.
- **Identity**: the agreement councils are also a key locus for debating the rules and purpose of a given convention. The Board has ultimate authority to make decisions on these matters. Given the Board's lack of management capacity and the weak status of agreement councils, the identity function of a convention is usually underdeveloped.

Figure 8 – Perceived weaknesses of conventions, considered through the lens of the VSM-based activity model at the level of a given convention.





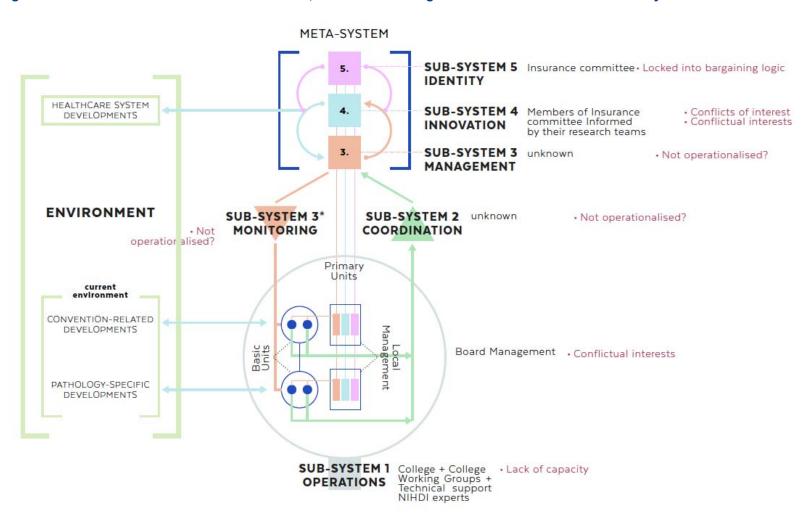
6.2.5.2 At the level of the NIHDI

Figure 9 presents the perceived weaknesses of conventions at the level of the NIHDI.

- **Operations**: the Board is hampered by significant resource constraints in exercising its mandate to initiate and govern conventions.
- Conflict resolution, Management, Audit: our research seems to suggest that the coordination and management functions at the NIHDI level are constrained by a narrowly budgetary logic and subject to a negotiation dynamic.
- Innovation, Identity: our research hints at a lack of alignment at the level of the NIHDI's Committee for Health Insurance, the General Council and the Minister of Public Health around the purpose of conventions and an appropriate way of governing the portfolio.

٠.

Figure 9 - Perceived weaknesses of conventions, considered through the lens of the VSM-based activity model at the level of the NIHDI





6.2.6 Reframing of the research question

Insight into the perceived strengths and weaknesses of conventions – by both financing authorities and stakeholders – and an appreciation of the climate of distrust that envelops the whole convention landscape (see discussion in section 6.2.4.3) has led the research team to slightly reframe the research question.

In section 0 we introduced the original research question as follows: "(...) the aim of this research project is (...) to develop an evaluation instrument that allows the Board of Medical Directors - the body within the NIHDI that has as its mandate to technically manage rehabilitation conventions, and the ultimate client for this piece of work – to collect the information needed to feed into this assessment. Hence, the research question that guided the work documented in the present report can be phrased as follows: 'What evaluation framework would help the Board of Medical Directors to assess whether so-called rehabilitation conventions are efficacious, efficient and effective?"

Our analysis in section 6.2.4.3 suggests that an objectifying evaluation instrument is unlikely to help the Board of Medical Directors to get a better grip on the performance of conventions. Rather, the opposite can be expected as yet another reporting requirement risks to enhance practitioners' sense of disempowerment.

Clearly, the long list of perceived weak points of conventions suggests that some kind of intervention is necessary to plug the gaps in the various subsystems. Within the scope of this project we therefore reconceptualised the research question as follows:

- The research endeavours to develop not merely 'an evaluation instrument' but 'an instrument to mobilise relevant information streams between key actors'.
- The relevance of information streams is judged on the basis of their capacity to support a learning process between actors:
 - Between care provider and patient;
 - o Within multidisciplinary teams that operate within a convention;

- Within the ecosystem of providers that operate within a given convention:
- Between providers and the financing authority;

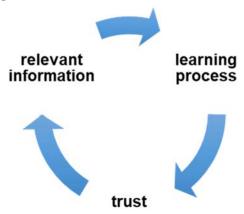
An evaluation protocol for NIHDI conventions

Between institutional actors within the financing authority.

In this project the focus is on supporting the learning process between providers and the financing authority.

 The learning process will be instrumental in rebuilding trust between the key actors in the convention system.

Figure 10 – A reinforcing loop of trust building, learning and generating relevant management information



Therefore we propose that this research project's goal is understood as contributing to a reinforcing loop that leads to more relevant information becoming available, more social capital between key actors and overall a stronger management capacity of a portfolio of more effective and resilient conventions.

For the mechanisms behind the causal relationship between generating relevant information and building social capital (trust), we refer to the Legitimacy Triangle described by Kerkin (2017)³¹.

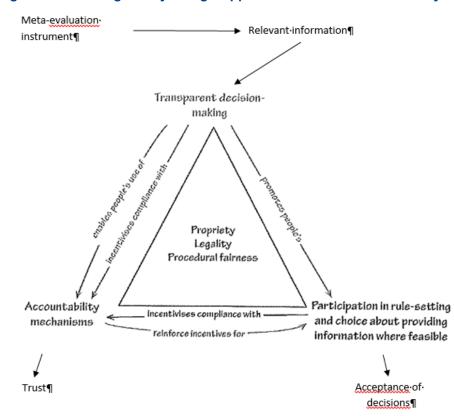


The basic premise of the Legitimacy Triangle is that three levers incentivise decision-makers' voluntary compliance with constitutional norms, which creates legitimacy. Legitimacy is being defined as "a 'reservoir of goodwill' that allows people to maintain confidence in institutions' long-term decision-making"³². In short, transparency makes decision-makers more accountable, and promotes participation. Accountability and participation are mutually reinforcing (see Figure 11).

The meta-evaluation instrument intervenes on the transparency lever and sets in motion the logic of the Legitimacy triangle. The use of the instrument facilitates transparency by making relevant information accessible to all parties involved, in this case especially the centres and the Board of Medical Directors. This enables the centres to participate in an informed way and hold the Board of Medical Directors to account. Transparency is closely linked to accountability and participation mechanisms. Accountability incentivises compliance with norms, but also promotes trust and confidence in decision-makers and system settings. Participation enables the centres to test and challenge the decision-maker's information and assumptions. Decisions based on accurate information and where decision-maker's assumptions are understood, are more likely to be accepted, even if they disagree with them.

In sum, the use of the meta-evaluation instrument brings about transparency, which incentivises accountability and participation, and brings decision-makers (here the Board) into close proximity with those affected by their decisions (here the centres). This kind of proximity creates mutual trust: at the one hand it helps the Board to meet the centres expectations of fairness through a better understanding of what those expectations are. At the other hand the centres get access to the information and assumptions underlying the Board's decisions, which creates understanding and acceptance. Hence understanding and acceptance are the products of a learning process set in motion by making information mutually accessible through the instrument.

Figure 11 – The Legitimacy triangle applied to the context of this study



Source: Adapted from Kerkin, 2017, p. 77.

The proposed reconceptualisation of the research question is coherent with a broader concept of evaluation that has been labelled 'complexity-sensitive evaluation' or 'developmental evaluation'³⁰, which aims at generating trust

between evaluator and evaluee. The Table 11 below summarises the difference between a 'traditional' evaluation approach and a complexity-sensitive approach.

Table 11 - From 'traditional evaluation' to 'complexity-sensitive' evaluation (adapted from 30)

	Traditional evaluation	Complexity-sensitive evaluation
Focus	Render overall judgments of success or failure. Focus on preordinate criteria of effectiveness, efficiency, impact and scalability. Interim evaluation will be focused on improvement and fine-tuning of an existing program model.	Provide timely feedback for development, enabling systems innovation, developing competences, negotiating ad interim decision points, building self-confidence and trust, documenting learning process.
Context	Goals known, intervention reasonably well conceptualised.	Complex mission, high level of ambition, heterogeneous network, no standardised intervention model, multiple pathways possible.
Approach	Based on a priori, cause-effect logic model.	Based on evolving pattern detection informed by observation and interaction of an adaptive strategy.
Evaluator stance	Credibility depends on independence.	Evaluator as embedded facilitator and learning coach. Credibility depends on a mutually respectful relationship.

Clearly, the organisation and delivery of multidisciplinary care and rehabilitation is a complex mission and so is the management of a highly differentiated portfolio of rehabilitation conventions. These settings are conducive to implementing a more holistic evaluation concept that is oriented towards joint learning, continuous development and ensuring adaptiveness. This requires a respectful collaborative relationship between evaluators and evaluees. In the next chapter we will elaborate the implications of this approach.

6.3 Outline of a meta-evaluation protocol

6.3.1 Preliminary outline of a meta-evaluation protocol

The analysis discussed in the previous chapter section suggests that there is a need for a more holistic (complexity sensitive, developmental) concept of evaluation. In line with the reframed research question an instrument has to be developed that mobilises relevant information streams between financing authorities and professionals working within the scope of a rehabilitation convention. This instrument needs to support a process of learning about what works and what doesn't across the three transformation levels (patient, service, system) and needs to support a process of continuous adaptation. However, the analysis hypothesises how this need emerges in a specific setting of eroding trust between actors in the convention system. Budgetary constraints and severe limitations in governance capacity at the NIHDI fuel this dynamic. For an evaluation instrument to be effective in supporting this dynamic of learning and trust-



building through the mobilisation of relevant, performance-related information, it needs to be accompanied by a number of flanking measures. Below we first discuss the flanking measures and then zoom in on the scope of the evaluation instrument proper.

6.3.1.1 Flanking measures

We propose the following set of interventions to activate and support a standardised evaluation protocol for conventions.

- Intervention 1: To strengthen the technical unit that supports the Board of Medical Directors. The Board's limited resources (time, manpower) are significantly overstretched. For the Board to be able to engage in a closer and more dynamic interaction with care providers, it has to be able to rely on a technical unit that has more manpower.
- Intervention 2: To reactivate 'agreement councils' across the
 whole convention landscape. Our research points out that agreement
 councils, where representatives of the NIHDI and the care providers
 working in a given convention meet and discuss, are often not (or
 barely) operational. This leads to feelings of distrust and loss of control
 for authorities and professionals alike. It is vital that these fora are
 revitalised.
- Intervention 3: To develop a standardised, generic metaevaluation protocol for conventions. This is the subject of the present research. The evaluation instrument assumes the form of a 'meta evaluation protocol' that outlines the scope for the discussion within the revitalised agreement councils. It is not a detailed checklist, but an inventory of key questions that give all the actors involved a feeling for the relative performance across the three transformation levels (patient, service, system; see section 4.5) The meta-evaluation protocol needs to provide an orienting framework within a 'developmental' approach to evaluation (section 4.6).

- Intervention 4: To develop a system to manage the data output from conventions in an integrated way. One of the weak points of conventions is that very often data collected about the care provided in a convention remains fragmented and is not integrated at the level of the NIHDI.
- Intervention 5: Dynamise the policy system at NIHDI level. Realign around a shared vision on the conventions instrument. If there ever was a coherent strategic vision around conventions as a financing mechanism, it has been diluted by a legacy of opportunistic use of the instrument. Considered from that angle the instruments' flexibility is also a liability.
- Intervention 6: To develop Measures of Performance for the Board
 of Medical Directors and an appropriate monitoring protocol. A
 clear strategic framework for conventions would need to be translated
 into an overarching set of performance measures at the landscape
 level. This will help the Board to advise the Insurance Committee about
 priorities in allocating its limited resources.
- Intervention 7: To develop a range of criteria and scenarios to terminate conventions. Within care providing institutions there is considerable uncertainty about the stability of NIHDI financing. This leads providers to assume a risk mitigation strategy, avoiding contact with the NIHDi so as not to raise unwarranted suspicions. A clear termination framework will provide the Board with a powerful instrument to incentivise providers to adhere to convention standards. Furthermore it will create a more predictable horizon for institutions working in the framework of conventions.

These proposals are intended to reinforce the Board's capacity to govern and to incentivise providers, increase the Board's and the Insurance Committee's accountability, increase the quality of dialogue between convention centres and the responsible NIHDI bodies (Board and Insurance Committee), increase the relevance and actionability of data emerging from the conventions, and increase the predictability of the financing for care providers working within the framework of conventions.



6.3.1.2 Scope of a generic meta-evaluation protocol for conventions

A preliminary version of the proposed meta-evaluation instrument included 12 questions. These questions are informed by three considerations:

- The concerns originally voiced by the Board of Medical Directors;
- The perspectives of the stakeholders harvested from the interviews;
- The measures of performance derived from the root definition.

The questions are generic and are open to fine-tuning, deepening and generally to more precise formulation. At this stage in the research it was important to assess whether the scope of the evaluation protocol was felt to be adequate by stakeholders. If so, further streamlining of the metaevaluation protocol would follow in a final phase of the research project.

The questions are the following:

- Question 1: Is a given convention still necessary? Does it respond
 to a relevant public health need? Are there alternative
 care/financing models? The answer to this basic question needs to
 provide the rationale for the continued existence of any convention. It
 basically asks what the effectiveness of a convention is. It is important
 that the question is revisited at widely spaced time intervals also after
 the establishment of a convention.
- Question 2: Does the convention lead to a geographic coverage of services that corresponds to demand? The Board of Medical Directors endeavours to program conventions in such a way that there is a geographic coverage that meets demand. It is important to verify on a regular basis whether a convention meets this requirement.
- Question 3: Do institutions work cost-efficiently under a given convention? Cost-efficiency is an important concern of the financing authority, hence it has to be included in the evaluation protocol.
- Question 4: Do institutions provide best-in-class care under a given convention? Providing high quality care is an obvious requirement for any convention.

- Question 5: Do conventions lead to a de facto concentration of expertise? Again this is seen as a key requirement by the Board of Medical Directors, hence it is advisable to include it in the metaevaluation protocol.
- Question 6: Do conventions lead to a context in which clinical professionals are able to exercise professional judgment? In multidisciplinary care settings there is an inescapable tension between the variety of patient demands and the need to streamline care providing processes. This question takes the perspective of clinical professionals and wants to probe whether they feel they have sufficient leeway in shaping their practice within the scope of a convention.
- Question 7: Do conventions stimulate a culture of clinical stewardship in the institutions that are part of it? This question wants to probe to what extent a convention leads to an alignment and a spirit of partnership between clinical professionals and administrators in organisations that provide care within the framework of a convention.
- Question 8: Do conventions stimulate innovation? Adaptiveness requires that there is scope for innovative practices when working in conventions. This is an open question that wants to make explicit to what extent this is the case in a convention and what form these innovations might take.
- Question 9: Are conventions used in an unintended way? This is an open question that may address some of the concerns voiced by the Board of Medical Directors, for instance related to care providing institutions' practice of acquiring physical assets (buildings) via convention financing.
- Question 10: What is the experienced tension between the care model and financial boundary conditions associated to a given convention and the actual patient needs? We have observed that clinical professionals and administrators are used to bricolaging resources to cater for varying patient demands. This question wants to probe what the degree of bricolage is within a given convention.

- ٤
- Question 11: What is the experienced tension between the existing care practice and the terms laid down by the convention as it was originally established? The understanding and framing of a particular pathology and the therapeutic approaches to deal with it may change significantly over time. This question wants to help assess to what extent there is a gap between the governing terms associated with a convention and the evolving understanding of practitioners.
- Question 12: To what extent does a convention integrate input from patients or their representatives? If conventions have the ambition to be needs-driven, they have to include the perspectives and experiences of patients or their representatives.

The questions address issues of efficacy, efficiency and effectiveness as linked earlier to the with the core purpose of a convention (see section 4.5).

Table 12 – Categorisation of the questions included in the draft metaevaluation protocol in line with the measures of performance

Level	Evaluation domain	Measure of performance	Questions
Patient-level	Efficacy	Clinical and functional outcomes	Q4, Q10
Service level	Efficiency	Degree to which the system functions within human, financial and infrastructural resource constraints	Q3, Q5, Q10
System level	Effectiveness	Degree to which the convention adheres to the value base (needs oriented, patient-guided)	Q1, Q2, Q7, Q9, Q12
		Degree to which the system incorporates best available evidence	Q4, Q8

syst	ree to which the em is able to learn evolve with	Q6, Q8, Q11	
char	nging demands.		

6.3.2 Validation in a stakeholder workshop

The preliminary outline of a meta-evaluation protocol provided a basis for the positioning of the stakeholder workshop. The workshop was held on 9 March 2017. Sixteen participants attended the workshop. The lists of participants, consisting mainly of clinicians that were involved in the interview campaign of the research, is included in Appendix 4. The objective of the workshop was as follows:

- Share the insights from the analysis along the lines presented above.
- Ask participants to refine the questions included in the meta-evaluation protocol.
- Ask participants to suggest where in their view the 'burden of proof' is for each question (i.e. who is responsible for submitting the associated information).

The presentation included the following elements:

- Discussion of assignment, research questions and approach;
- Overview of key findings regarding the financing instrument 'conventions';
- Concerns voiced by the client of this research project (the NIHDI Board of Medical Directors);
- Hypothesised wider background against which the demand for an evaluation instrument can be understood;
- Reframing of the research question;
- Operationalisation of the approach: system definition, patient/service/system-level transformation, measures of performance, a Viable Systems Model-based diagnostic;



 Proposed interventions. A meta-evaluation protocol consisting of 12 generic questions.

Immediately following the presentation, participants were asked to articulate their own view regarding these proposed interventions and the content of the meta-evaluation protocol. We relied on an electronic voting system to capture each individual attendee's personal opinion.

To assess the suggested interventions, attendees had the choice between four possible answers:

- 1. Good idea (meaning: "I find this proposed intervention a good idea").
- Bad idea.
- 3. Needs discussion.
- 4. No opinion.

To assess the suggested questions as part of the meta-evaluation protocol, the possible answers were:

- 5. Good question.
- 6. Bad guestion.
- Needs discussion.
- 8. No opinion.

For each question a subsidiary question was asked: is the 'burden of proof' (i.e. the responsibility to gather the information necessary to answer the associated question in the meta-evaluation protocol) on the NIHDI (option a) or on the provider (option b). Attendees worked sequentially through all the questions and submitted their responses via the electronic voting system. Replies were automatically tallied and visualised by the software. After each question the total number of replies for each answer category was fed back to the participants.

6.3.2.1 Validation of the proposed interventions

Table 13 shows the voting pattern for the seven proposed interventions.

Table 13 – Overview of the votes related to the proposed interventions

		Number o	of respondents (%)
	'Good idea'	'Bad idea'	'Needs discussion'	'No opinion'
Interventions				
1: Reinforce the technical unit to support the NIHDI Board of Medical Directors.	56	0	44	0
2: Activate agreement councils for the whole convention landscape.	60	0	40	0
3: Operationalise a standardised, but generic meta-evaluation protocol.	40	27	33	0
4: Develop integrated data management and quality control for each convention.	50	19	25	6
5: Dynamise the policy system at NIHDI level. Realign around a shared vision on the conventions instrument.	38	6	44	13
6: Identify 'measures of performance' for the NIHDI Board of Medical Directors.	75	0	13	13
7: Develop transparent 'termination scenarios' for conventions.	94	0	6	0



The voting results show that most interventions had a qualified support from the workshop participants. Either they supported them or thought that discussion was necessary to further flesh them out. Intervention 6 and 7 garnered the most outspoken support. Intervention 3 was most sceptically received. Interestingly, this intervention provides the rationale for the present research project. Intervention 5 was relatively most seen as in need of discussion or clarification.

One major theme of discussion concerned the functioning of the 'agreement councils'. The interviews revealed that agreement councils were very often not operational. This led to a suggestion for a specific intervention, namely to revitalise these councils across the whole convention landscape. The exchange in the workshop confirmed that agreement councils are often not active as a governance body within a convention. Clinical professionals are worried about this and they are frustrated by the lack of transparency of the decision-making in the NIHDI's Board of Medical Directors and Insurance Committee. On the other hand, often clinicians feel it is risky to open up to scrutiny within the context of an agreement council as this may have implications on financial resources. So they are not proactive in using the opportunities offered by an agreement council. This is quite clearly a manifestation of a lack of trust between the clinical professionals and the financing authorities. This leads to conventions become too rigid, which is a genuine concern of clinicians. Very often conventions are not able to adjust to epidemiological or institutional changes in the broader health care environment.

6.3.2.2 Validation of the proposed questions to be included in the meta-evaluation protocol

Table 14 shows the voting pattern for the 12 proposed questions that make up the meta-evaluation protocol.

Table 14 – Overview of the votes related to the suggested questions to be included in the meta-evaluation protocol

	Number of respondents (%)			
	'Good question	'Bad question	'Needs discussion'	'No opinion'
Question 1: Is the convention still necessary? Does it correspond to a genuine public health need? Are there alternative care/financing models?	63	19	19	0
Question 2: Does the convention lead to a geographic coverage of services that corresponds to demand?	75	6	6	13
Question 3: Does the provider work cost-efficiently within the framework of the convention?	25	13	44	19
Question 4: Is the provider offering best-inclass care within the convention?	63	0	31	6
Question 5: Does the convention lead to a de facto concentration of expertise?	88	6	6	0
Question 6: Does the convention leave room for the exercise of professional judgment?	81	6	0	13
Question 7: Does the convention stimulate a culture of clinical	56	31	6	6

mitigates remediation costs elsewhere in the system). There seemed to be
a consensus amongst the participants that a broader health economic
perspective ought to be adopted to assess cost efficiency as opposed to a
narrowly operational perspective.

stewardship in care providing organisations? Question 8: Does the 81 6 6 6 convention stimulate innovation? 7 Question 9: Is the 47 13 33 convention used in an 'unorthodox' way? 6 6 6 Question 10: What is the 81 tension experienced between the care model and financial conditions associated with the convention, and patients needs? Question 11: What is the 88 0 13 0 tension experienced between the current care provision practice and the conditions originally laid down in the convention? 56 25 Question 12: To what 13 6 extent does a convention integrate input from patients their or representatives?

Question 4 (assessment of the quality of care) also needs further clarification but is considered to be a good question by over 60% of respondents (Question 4). The question that garners most negative votes assesses the degree to which the convention stimulates a culture of clinical stewardship (Question 7). However, more than half of respondents think it is a good question. There seems to be unmitigated support for Questions 2, 5, 6, 8, 10 and 11 as they are endorsed by at least 75% of the workshop participants.

It is interesting to note that the scope of the meta-evaluation protocol seems to be generally endorsed while it appears from the first part in the survey that the operationalisation of a meta-evaluation protocol was one of the few controversial interventions. This discrepancy was discussed following up on the voting procedure in the workshop. The following ideas and concerns were put on the table:

- At least one participant thought that the voting result in part I of the survey would have been very different (i.e. manifesting a more outspoken support) if the question would have been asked after the meta-evaluation protocol was discussed in detail. Working through the survey question by question gave the participants a much better grasp what the survey was about.
- Another concern that was voiced relates to the generic character of the protocol. So it is not the operationalisation of a meta-evaluation protocol per se that is seen as problematic but its generic character. One participant voiced scepticism that a single template protocol could fit the variety of existing conventions. This was reinforced by other participants who thought that the protocol ought to reflect the broad aims of a convention, in line with the typology proposed: oriented towards rehabilitation, case management and diagnosis and counselling, respectively. For instance, the assessment of cost-efficiency is more difficult in a setting that is oriented towards counselling and/or rehabilitation as opposed to a more rigidly clinical and therapeutic

The voting results seem to point to a widely shared assessment that the scope of the meta-evaluation protocol is appropriate. Most questions are qualified as 'good questions', with just a few exceptions. The question that is most in need of further discussion relates to the 'cost-efficiency of the care that is provided within a convention (Question 3). Participants commented that it needs to be clarified whether the cost-efficiency is limited to the scope of the convention proper, or has a bearing on the wider care system. The care provided within a convention may lead to cost savings elsewhere in the health care system, or it may provide a service that is much cheaper than an option that is relying on residential care (for instance, care provided within the diabetes convention leads to lower incidence of renal insufficiency which



setting. The protocol ought to reflect these differences. It was agreed that this question - the degree to which the protocol needs to be customised to different types of conventions - will be taken up in the next phase of the research process.

- It was mentioned that evaluation in itself is not the issue, but caution is needed as regards the kinds of indicators that are relied. In the past conventions have been terminated (notably oriented towards chronic pain and chronic fatigue syndrome) based on very clear and transparent but ill-judged performance indicators. This needs to be avoided.
- Participants also exchanged views on the voice of patients in shaping and evaluating conventions. The existing practice to focus a convention on specific, pathology-related groups of patients was endorsed by workshop participants. Orienting a convention towards more hard to define 'needs patterns' would likely compromise their cost-efficiency. Also a tension is seen between the need to work evidence-based and the requirement to include a patient (satisfaction) perspective. Finally, in a number of conventions it is very difficult to collect patient satisfaction data as many patients are in some way subject to legal constraints. These are situations in which patients by necessity will not be satisfied.

6.3.2.3 Assessment of the burden of proof

For each of the questions included in the proposed meta-evaluation protocol, workshop participants were asked to assess where the burden of proof resided: on the NIHDI, or on the providers. However, this part of the survey didn't work out particularly well. It became clear very quickly that four possible answers should have possible:

- Burden of proof on NIHDI;
- Burden of proof on the provider;
- Burden of proof on both NIHDI and provider;
- Burden of proof on an external party.

The latter two options were not provided for in the automated survey and this could not be remedied on the spot. So it was agreed that workshop participants who wanted to opt for option 3 or 4 would not vote. That resulted in a different number of votes for each question. Table 15 below provides an overview.

Table 15 – Overview of the votes related to the 'burden of proof' questions

	В	urden of pro	of
	NIHDI (%)	Provider (%)	Not responded (%)
Questions			
Question 1: Is the convention still necessary? Does it correspond to a genuine public health need? Are there alternative care/financing models?	50	50	
Question 2: Does the convention lead to a geographic coverage of services that corresponds to demand?	29	71	
Question 3: Does the provider work cost-efficiently within the framework of the convention?	0	100	
Question 4: Is the provider offering best-in-class care within the convention?	0	100	
Question 5: Does the convention lead to a de facto concentration of expertise?	44	56	
Question 6: Does the convention leave room for the exercise of professional judgment?	9	91	
Question 7: Does the convention stimulate a culture of clinical	0	100	

_	
Ĺ	

stewardship in care providing organisations?	
Question 8: Does the convention stimulate innovation?	0 100
Question 9: Is the convention used in an 'unorthodox' way?	50 50
Question 10: What is the tension experienced between the care model and financial conditions associated with the convention, and patients needs?	0 100
Question 11: What is the tension experienced between the current care provision practice and the conditions originally laid down in the convention?	0 100
Question 12: To what extent does a convention integrate input from patients or their representatives?	0 100

The overall conclusion from the workshop was that the research had put in place a solid foundation for an evaluation protocol. The guiding purpose encompassed by the system definition was endorsed and also the two-tier approach, with a meta-evaluation protocol embedded in a wider set of interventions met with approval. The overall shape of the evaluation protocol was seen to be promising but it was felt that it would have to be at least partially customised to reflect the specificity of different types of conventions. Finally, also the need for a more adaptive governance system based on mutual trust between clinical professionals and financing authorities was underlined.

6.3.3 Validation with the Board of Medical Directors

The preliminary outline of a meta-evaluation protocol was also shared with members of the Board of Medical Directors^e in a 3-hour meeting (25 April 2017). The meeting was conceived as a briefing of the Board on interim results in the research project, followed by an open discussion. We relied on the same introductory presentation that was used to brief the participants to the stakeholder workshop (see section 5.2).

The Board formulated the following remarks in response to the elements included in the presentation:

- The proposed typology of conventions (see chapter 4) was felt to be adequate. There was a suggestion to create a fifth category, consisting of conventions that only reimburse the spend on medical devices (e.g. heart defibrillators, oxygen therapy).
- The reimbursement of data registration activities has been a moot point in discussion with care providers for a long time. Does it have to be compensated or is it simply a matter of good practice? Today there is only financial compensation for care providers who rely on the ISP-WIV for data processing.
- The root definition was felt to be an accurate reflection of the core purpose of a convention.
- The VSM-based activity models, the triple level transformation and the associated measures of performance were seen to be relevant to the task of developing an evaluation instrument.
- The Board was less unanimous in its support of the 'erosion of trust' hypothesis. However, they acknowledged that the increasing pressure on financial resources leads to an increasing focus on making sure that these resources are used adequately and correctly. Also, they agreed

Present were: Dr. De Baerdemaker (Liberale Mutualiteiten), Dr. Dubois (CM, Spoorwegen), Dr. VandenBerghe (CM), Dr. C. Van Hul (Onafhdankelijke), Dr. A. Wyffels (voorzitter), Dhr. G Verscuren (technical cel, NIHDI)



that care providers might frame the desire to develop an evaluation instrument as driven by budget constraints.

- Members of the Board acknowledged that there is no quick fix for the challenge of evaluating conventions. Beefing up shop floor inspections is not an obvious strategy as there is limited capacity within NIHDI. Moreover, NIHDI inspectors are generalists who would need to be better trained in the specific matters addressed by care providers in rehabilitation conventions.
- Despite concerns about the 'erosion of trust' hypothesis, members of the Board did not object to the reframing of the research question. Members of the Board agreed that a more interactive relationship with care providers via revitalised agreement councils would certainly help in reinforcing the Board's confidence that resources were well spent. However, the Board stressed that agreement councils are not a totally neutral platform to engage in open discussions about the performance of conventions given the assumption that care providers' financial interests will always play a role in providers' positions. The Board wondered whether it would be possible to surface the role of these financial interests in the evaluation instrument.
- Also "there is a big gap between what we can do and want to do." The Board acknowledged that its own capacity to technically govern the landscape of conventions is limited. Organising a single agreement council every year with all of the operational conventions is not a realistic ambition. The Board thought it was unrealistic to expect that more resources would be allocated to manage the portfolio of conventions. It would be very difficult to make that case as the rehabilitation sector represents only a minor part of the health care budget and is seen to be manpower intensive. The trend in the sector is that the need for management resources relative to the health care budget involved is increasing. Conventions have been increasingly specific in their requirements, asking for more upfront investment in their development. Furthermore, the last decade has seen the initiation of minor conventions with relatively limited budgets associated. However, there is no strict positive correlation between the budget

involved and the resources needed to develop and manage a convention.

• The Board acknowledged the relevance of the questions included in the preliminary version of the meta-evaluation protocol. It suggested to be more specific in the phrasing of the question about termination scenarios: does this refer to the termination of the convention with a given care provider or does it concern the convention as a whole?

Overall, the members of the Board of Medical Directors approved of the general thrust of the analysis and the key results emerging from it. However, they felt an uncomfortable tension with the resource constraints that the Board is facing and the unlikelihood that these would be remedied in the short term future.

6.3.4 Fine-tuning in collaboration with clinical professionals

The validation workshop opened the way to the next phase of the research project. Initially this was conceptualised as a 'test period' during which the prototype instrument would be deployed within a number of care providing institutions. However, it was decided to reposition this part of the research as an opportunity to further operationalise the prototype instrument in collaboration with clinical professionals. This repositioning was prompted by the concern that was voiced during the validation workshop that the metaevaluation protocol ought to at least reflect the specificity of different types of conventions. So the aim of the next phase in the research was to elaborate and specify the 12 questions in the proposed evaluation protocol in collaboration with professionals operating in different types of conventions. It was decided to engage with four (teams of) professionals, one in each of the four broad types of conventions identified in the proposed typology:

- Rehabilitation
- Multidisciplinary care (case management)
- Multidisciplinary diagnosis & support
- Multidisciplinary counsel

Following persons/institutions were identified:



session of thematic clustering.

- Rehabilitation: Philippe Duval and Chantal Seret (Cardiac rehabilitation convention & General Rehabilitation for neurological and locomotor diseases convention, Cliniques de l'Europe, work session on 08.05.17)
- Multidisciplinary care: Dr. Frank Nobels (Diabetes convention, OLV Aalst, work session on 18.04.2017)
- Multidisciplinary diagnosis & support: Dr. Bertien Buyse (CPAP convention, UZ Leuven, work session on 18.04.2017)
- Multidisciplinary counsel: Dr. Martin Caillet (Female genital mutilation convention, CHU Saint-Pierre: work session on 28,04,2017)

Each of these professionals were contacted with a request for a 4-hour timeslot. This would be used to work with the professionals through each of the 12 questions of the meta-evaluation protocol. The generic phrasing of the top level questions would not change but each question would be supplemented with a list of subsidiary questions that would reflect the specificity of the convention addressed. The work sessions were organised as follows:

- Recap of the aim of the research and key findings (15').
- Review of the list of questions in the meta evaluation protocol and workshop voting results (20').
- Ranking of the questions in terms of perceived need for specificity and elaboration (20').
- Elaboration of the questions in order ranked (120').
- Clustering of the elaborated questions in thematic clusters (30').

After the four work sessions, the results would be compared to assess the overlap and differences and to collate all the results into a single framework consisting of a generic part applicable to all conventions and a part customised for each of the four main types of conventions.

See Appendix 6 for the clinical professionals' detailed comments to a preliminary version of the meta-evaluation instrument.

- Cluster 1: centered around the key question Q5 (concentration of expertise). If Q5 is taken as a starting point, then a number of questions can be added as sub-questions as they point to necessary conditions to develop a concentration of expertise: Q6, Q7, Q8, Q9, Q12.
- Cluster 2: centered around public health needs and access to care, with Q1 being the main question, and Q2 focusing on geographic coverage.
- Cluster 3: focused on efficiency (Q3), quality of care (Q4) and related evaluation criteria, as well as the tension between current needs/practices and the conditions laid down in the convention (Q10 and Q11).

6.3.4.1 Discussion of the fine-tuning sessions

The fine-tuning sessions delivered what was expected from them, at least partially. Clinical professionals took the opportunity to elaborate the questions with relish. The sessions also offered confirmation of the relevance of the protocol. All professionals found it a very interesting lens to look at their practice. However, it seems that the different clinical perspectives, selected to reflect distinct elements in the typology of conventions, did not result in sets of questions that were specific for their kind of multidisciplinary practice. Therefore we propose a single consolidated version of the meta-evaluation protocol, rather than different versions that correspond to distinct practices.



6.3.5 Final version of a meta-evaluation protocol

6.3.5.1 Clustering of the questions

First we rearrange the 12 questions in distinct thematic clusters. The purpose of this rearrangement is to make the convention more legible and user-friendly. There is no single right way to do this as numerous substantive and logical links can be surmised to exist between these different aspects. Here we follow the leads provided by the clinicians (section 5.4), with some modifications. We propose to group the questions in five clusters.

• Cluster A – Strategic dimension: Q1, Q2

This cluster includes Q1 (public health need) and Q2 (geographic coverage). These are questions that have a bearing on the convention as a whole. They need to be asked at larger time intervals. NIHDI has to provide the data to answer these questions.

Cluster B – Quality dimension: Q4, Q5

This cluster includes Q4 (best-in-class care) and Q5 (concentration of expertise). Q5 addresses a key determinant of quality of care. These are questions that need to be asked on a regular basis. The 'burden of proof' for Q4 lies with the care provider. Q5 requires input from both financing authority and providers. We also might have included Q6 (professional judgment) in this cluster but opted to integrate it in the Practice cluster instead.

• Cluster C – Financial dimension: Q3

This cluster includes only Q3 (cost-efficiency). We feel this question warrants a distinctive place in the protocol as it is very central to the concerns of the Board of Medical Directors. Also, in line with professionals' suggestions, the question will be unbundled in a number of subsidiary questions. This question requires input from both financing authority and care provider.

• Cluster D – Practice dimension: Q6, Q7, Q10, Q11, Q12

Q6 (professional judgment), Q7 (clinical stewardship), Q10 (tension convention and patient needs), Q11 (tension original convention and current practice) and Q12 (patient input). This cluster groups questions that probe for the way professionals experience the fit between the technical and financial conditions associated to the convention and the way they exercise their profession with patient interests in mind. Burden of proof for all these question necessarily lies with the professional.

Cluster E – Innovation dimension: Q8, Q9

This cluster includes Q8 (innovation) and Q9 (unorthodoxy). Q9 will be rephrased in line with professionals' suggestions to open up both positive and negative aspects of providing care in 'unorthodox' way. Whilst the question is seen as ambiguous, none of the professionals involved in the fine-tuning sessions suggested to eliminate it from the protocol. One professional suggested to include Q12 (patient input) in this cluster. We feel this is a defensible suggestion but we opted to include the question in the Practice cluster instead assuming that patients ought to be involved in a very practical way in shaping the care provided. The burden of proof for Q8 lies with the provider. For Q9 this depends on how exactly the question is phrased. We suggest to rephrase it in a way that adheres more closely to the spirit of Q8 and hence the burden of proof will also lie with the provider.



6.3.5.2 Rephrasing of the questions

Here we will suggest a rephrased version of the questions originally included in the meta-evaluation protocol. We will switch to a new roman numbering to mark the shift to the reclustered sequence (supplemented with the original numbering in brackets).

• Cluster A – Strategic dimension

Question | (Q1): Is the convention still necessary?

- Question I.1: Does the convention correspond to a demonstrable public health need?
- Question I.2: Are there alternative care/financing models available to respond to that public health need?

We leave the question essentially unaltered but separate it in a generic main question and two, more specific subsidiary questions. The wording has been slightly revised to render the question less ambiguous.

Question | | (Q2): Does the convention lead to a geographic coverage of services that corresponds to demand?

We leave the question unaltered.

Cluster B – Quality dimension

<u>Question III (Q4)</u>: Is the provider offering best-in-class care within the convention?

- Question III.1: Are care providers able to meet the clinical goals stated in the convention?
- Question III.2: Are clinically relevant and transparent outcome parameters available to assess the quality of care provided? If not, what efforts and investments are being done to identify them?
- Question III.3: Are care providers committed to increasing the quality of care financed by the convention within their institution?
- Question III.4: Is there a demonstrable effort to operationalise a convention-wide quality management system?

We supplement the main question, which remains unaltered, with a series of subsidiary questions. Question III.1, III.3 and III.4 were drawn from the discussion on Question 4 in section 5.4.1. Question III.2 derives from 5.4.2.

$\underline{\text{Question IV}}$ (Q5): Does the convention lead to a de facto concentration of expertise?

- Question IV.1: Does the convention lead to a de facto pooling of expertise at the level of the target group-related health care system as a whole?
- Question IV.2: Does the convention lead to an adequate pooling of multidisciplinary (clinical and paramedical) expertise within a participating care institution?

We leave the main question unaltered but, in line with suggestions offered in section 5.4.1, add two subsidiary questions to probe for concentration at two levels: at the level of the health care system as a whole, and at the level of the care providing institution. In Question IV.2 we also added a specific reference to 'clinical and paramedical' expertise (see section 5.4.3).

Cluster C – Financial dimension

 $\underline{\text{Question V}}$ (Q3): Does the multidisciplinary team work cost efficiently within the framework of the convention?

- Question V.1: Are resources adequately used to meet the objectives agreed in the convention?
- Question V.2: Is the staffing allowed by the convention adequate to meet the care package demanded?
- Question V.3: Are health outcomes commensurate to the resources allocated?
- Question V.4: Does the convention help to avoid alternative health care costs?



The lead question is left essentially untouched. In line with a suggestion from section 5.4.4 the notion of 'provider' is specified as being the multidisciplinary team that works within the convention. The lead is complemented with four subsidiary questions. Question V.1, V.2 and V.3 were offered in section 5.4.1. They also address the issue related to Question 3 in section 5.4.4. Question V.4 derives from section 5.4.2.

• Cluster D – Practice dimension

Question VI (Q6): Does the convention create conditions for the exercise of professional judgment?

- Question VI.1: Does the convention allow to engage in effective case management?
- Question VI.2: Does the convention allow the flexible pooling of multidisciplinary expertise in line with case requirements?

The lead question remains the same. We hold on to the notion of 'professional judgment' as there seems to be no viable alternative. The subsidiary questions derive from section 5.4.1 but sections 5.4.2 and 5.4.3 make a similar point. Question VI.1 can be read as an alternative phrasing of the lead question. We assume that the notion of 'case management' applies a wide variety of multidisciplinary care and rehabilitation settings.

Question VII (Q7): Does the convention lead to alignment between medical professionals and administrators in the care providing organisation with the best interest of the patient in mind?

The lead question has been rephrased so as to avoid the use of the ill-understood term 'culture of clinical stewardship'.

Question VIII (Q10): What is the experienced tension between the clinical and financial conditions associated to the convention and patient needs?

Apart from slight rewording we leave the question as it is. Clearly, professionals find it an interesting and question but the response is difficult to objectify. Also, it is a generative question as it triggers

reflections that go in different directions (cost efficiency, administrative burden, relationship, clinical expertise in technical supports ...).

Question IX (Q11): What is the experienced tension between the current clinical practice and the boundary conditions associated to the convention as it was originally conceived?

Again the question is only slightly reworded.

Question X (Q12): To what extent does a convention integrate input of patients or their representatives?

- Question X.1: How is patient input operationalised?
- Question X.2: Does patient input have impact on the actual services offered?

The lead question remains unaltered but is supplemented with two subsidiary questions. Question X.I derives from section 5.4.1 and X.2 from 5.4.3.

Cluster E – Innovation dimension

Question XI (Q8): Does the convention stimulate innovation (technological, organisational) for patients who receive care inside and outside the convention?

The lead question is elaborated in line with suggestions from section 5.4.1 (echoed by the point made in section 5.4.3).

Question XII (Q9): Is the convention used in an unorthodox way? Does the convention generate positive spinoffs of any kind (i.e. not limited to benefits within the scope of the convention only)?

In line with suggestions throughout section 5.4 the lead question is slightly reworded and supplemented question that probes for positive spinoffs of 'unorthodoxy'.



6.3.5.3 Final version of the meta-evaluation protocol

Below follows the final version of the meta-evaluation protocol (within the framework of this research project). Subsidiary questions more fully articulate lead questions. So, a response to a full set of subsidiary questions amounts to a response to the lead question. Thus considered the complete protocol consists of 22 questions.

STRATEGIC DIMENSION

Question I: Is the convention still necessary?

- Question I.1: Does the convention correspond to a demonstrable public health need?
- Question 1.2: Are there alternative care/financing models available to respond to that public health need?

Question II: Does the convention lead to a geographic coverage of services that corresponds to demand?

QUALITY DIMENSION

Question III: Is the provider offering best-in-class care within the convention?

- Question III.1: Are care providers able to meet the clinical goals stated in the convention?
- Question III.2: Are clinically relevant and transparent outcome parameters available to assess the quality of care provided? If not, what efforts and investments are being done to identify them?
- Question III.3: Are care providers committed to increasing the quality of care financed by the convention within their institution?
- Question III.4: Is there a demonstrable effort to operationalise a convention-wide quality management system?

Question IV: Does the convention lead to a de facto concentration of expertise?

- Question IV.1: Does the convention lead to a de facto pooling of expertise at the level of the target group-related health care system as a whole?
- Question IV.2: Does the convention lead to an adequate pooling of multidisciplinary (clinical and paramedical) expertise within a participating care institution?

FINANCIAL DIMENSION

Question V: Does the multidisciplinary team work cost efficiently within the framework of the convention?

- Question V.1: Are resources adequately used to meet the objectives agreed in the convention?
- Question V.2: Is the staffing allowed by the convention adequate to meet the care package demanded?
- Question V.3: Are health outcomes commensurate to the resources allocated?
- Question V.4: Does the convention help to avoid alternative health care costs?

PRACTICE DIMENSION

Question VI (Q6): Does the convention create conditions for the exercise of professional judgment?

- Question VI.1: Does the convention allow to engage in effective case management?
- Question VI.2: Does the convention allow the flexible pooling of multidisciplinary expertise in line with case requirements?

Question VII (Q7): Does the convention lead to alignment between medical professionals and administrators in the care providing organisation with the best interest of the patient in mind?

Question VIII (Q10): What is the experienced tension between the clinical and financial conditions associated to the convention and patient needs?



Question IX (Q11): What is the experienced tension between the current clinical practice and the boundary conditions associated to the convention as it was originally conceived?

Question X (Q12): To what extent does a convention integrate input of patients or their representatives?

- Question X.1: How is patient input operationalised?
- Question X.2: Does patient input has impact on the actual services offered?

INNOVATION DIMENSION

Question XI (Q8): Does the convention stimulate innovation (technological, organisational) for patients who receive care inside and outside the convention?

Question XII (Q9): Is the convention used in an unorthodox way? Does the convention generate positive spinoffs of any kind (i.e. not limited to benefits within the scope of the convention only)?

6.3.5.4 Practical use of the meta-evaluation protocol

As discussed in section 5.3.6, the meta-evaluation protocol is intended to support a process of developmental evaluation in which medical professionals and financing authorities are engaged on equal footing. Ideally, it provides a compass for regular exchanges with conventions' agreement councils.

Judging from professionals' feedback during the stakeholder workshop and fine-tuning sessions, we believe that this instrument will also be helpful in supporting a reflective process of quality improvement within multidisciplinary teams and between teams from different institutions.

As discussed in section 5.1 the introduction of a meta-evaluation protocol needs to be part of more encompassing effort to revitalise and take full advantage of the potential that the convention instrument is able to offer. Clearly, this is a minor but very valuable part of our healthcare landscape.

Ideally, the roll-out of the evaluation protocol could be tested in a number of pilot experiments that cover a representative section of the convention landscape.



■ REFERENCE LIST

- 6 Januari 2014 Bijzondere wet tot hervorming van de financiering van de gemeenschappen en de gewesten, tot uitbreiding van de fiscale autonomie van de gewesten en tot financiering van de nieuwe bevoegdheden
 - 6 Janvier 2014 Loi spéciale portant réforme du financement des communautés et des régions, élargissement de l'autonomie fiscale des régions et financement des nouvelles compétences, 2014.
- 2. 31 Januari 2014 Bijzondere wet met betrekking tot de Zesde Staatshervorming
 - 31 Janvier 2014 Loi spéciale relative à la Sixième Réforme de l'état, 2014.
- 3. Hannes P. Wat betekent de 6de staatshervorming voor de gezondheidszorgsector? CM-informatie. 2014;255:27-38.
- 4. Nolis I. Vlaamse revalidatieziekenhuizen. Portfolio. Brussel: Zorgnet/Icuro; 2015.
- Kiekens C, Van Rie K, Leys M, Cleemput I, Smet M, Kesteloot K, et al. Organisation and financing of musculoskeletal and neurological rehabilitation in Belgium. Health Service Research (HSR). Brussels, Belgium: Belgian Health Care Knowledge Center; 2007. 57D2007/10.273/18
- 6. Jegers M, Kesteloot K, De Graeve D, Gilles W. A typology for provider payment systems in health care. Health Policy. 2002;60(3):255-73.
- 7. Meyer T, Gutenbrunner C, Kiekens C, Skempes D, Melvin JL, Schedler K, et al. ISPRM discussion paper: Proposing a conceptual description of health-related rehabilitation services. J Rehabil Med. 2014;46(1):1-6.
- 8. Checkland P, Poulter J. Learning For Action: A Short Definitive Account of Soft Systems Methodology, and its use Practitioners, Teachers and Students. Chichester, United Kingdom: John Wiley and Sons Ltd; 2006.



- World Health Organisation. The need to scale up rehabilitation.
 Geneva: WHO; 2017. Rehabilitation 2030, a call for action
 WHO/NMH/NVI/17.1 Available from:
 http://www.who.int/disabilities/care/NeedToScaleUpRehab.pdf?ua=1
- World Health Organisation. Integrated Health Services- What And Why? Geneva: WHO; 2008. Technical Brief.
- 11. Nolis I, Vanhaute O, De Nutte H. Musculoskeletale en neurologische revalidatiegeneeskunde in Vlaanderen. Ontwerp van normen voor de functie, het zorgprogramma en het gespecialiseerde zorgprogramma. Brussel: Zorgnet-Icuro; 2016.
- 12. Nolte E, Knai C, McKee M. Managing Chronic Conditions: Experience in Eight Countries. Copenhaguen: WHO Regional Office Europe; 2008.
- 13. Chevreul K, Berg Brigham K, Durand-Zaleski I, Hernandez-Quevedo C. France: Health System Review. Health Syst Transit. 2015;17(3):1-218, xvii.
- 14. AMELI. Le parcours de soins coordonnés [Web page].2017 [updated 2017]. Available from: http://www.ameli.fr/assures/soins-et-remboursements/comment-etre-rembourse/le-parcours-de-soins-coordonnes.php
- 15. Steel D, Cylus J. United Kingdom (Scotland): Health system review. Health Syst Transit. 2012;14(9):xv-xxii, 1-150.
- 16. Kroneman M, Boerma W, van den Berg M, Groenewegen P, de Jong J, van Ginneken E. The Netherlands: health system review. Health Systems in Transition. 2016;18(2):1-239.
- 17. FAITH. Protocol voor de Wetenschappelijke ondersteuning en evaluatie van de pilootprojecten voor geïntegreerde zorg voor chronisch zieken in België (Het Integreo Programma). Brussels: Université catholique de Louvain, Vrije Universiteit Brussels, Université de Liège, Universiteit Antwerpen, Katholiek Universiteit Leuven; 2017.

- 18. FAITH. Évaluation scientifique et appui aux projets pilote de soins intégrés (PSI) pour les personnes atteintes de maladies chroniques en Belgique (Programme Integreo). Protocole. Bruxelles: Université catholique de Louvain, Vrije Universiteit Brussels, Université de Liège, Universiteit Antwerpen, Katholiek Universiteit Leuven; 2017.
- Pharos. Female genital mutilation [Web page].2017 [cited 10/07/2017]. Available from: http://www.pharos.nl/information-in-english/female-genital-mutilation
- Leebeek FW, Fischer K. Quality of haemophilia care in The Netherlands: new standards for optimal care. Blood Transfus. 2014;12 Suppl 3:s501-4.
- 21. Vat LE, Middelkoop I, Buijck BI, Minkman MM. The Development of Integrated Stroke Care in the Netherlands a Benchmark Study. Int J Integr Care. 2016;16(4):12.
- 22. Vandenbroeck P. Working with Wicked Problems. . Brussels: King Baudouin Foundation, ; 2012.
- 23. Checkland P, Holwell S. Information management and organizational processes: an approach through soft systems methodology. Information Systems Journal. 1993;3(1):3-16.
- 24. Wilson B. Soft Systems Methodology: Conceptual Model Building and Its Contribution. Chichester, United Kingdom: Wiley; 2001.
- 25. Beer S. Diagnosing the System for Organizations. London & New York: John Wiley; 1985.
- 26. Espejo R, Gill A. The Viable System Model as a Framework for Understanding Organizations. 2011. p. 9. Retrieved from https://www.researchgate.net/publication/265740055_The_Viable_S ystem_Model_as_a_Framework_for_Understanding_Organizations
- Walker J. Viable Systems Model A Guide For Co-operatives and Federations. 1991. Retrieved from: http://www.esrad.org.uk/resources/vsmg_3/pdf/vsmg_2_2.pdf
- 28. Choi BC, Pak AW. Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy:



- 1. Definitions, objectives, and evidence of effectiveness. Clin Invest Med. 2006;29(6):351-64.
- 29. Iles V. Why Reforming the NHS Doesn't Work. The importance of understanding how good people offer bad care. United Kingdom: Really Learning; 2011.
- 30. Quinn Patton M. Developmental Evaluation. Applying Complexity Concepts to Enhance Innovation and Use. New York: Guilford Press; 2010.
- Kerkin, S., Designing for legitimacy: a systems perspective". New Zealand Journal of Public and International Law: Vol 15 Issue 1, p. 67-91
- 32. Easton, D., A Systems Analysis of Political Life (Wiley, New York, 1965) as cited in James L Gibson, Gregory A Caldeira and Lester Kenyatta Spence "Why Do People Accept Public Policies They Oppose? Testing Legitimacy Theory with a Survey-based Experiment" (2005) 58 Pol Res Q 187 at 188, cited in Kerkin, S., Designing for legitimacy: a systems perspective". New Zealand Journal of Public and International Law: Vol 15 Issue 1, p. 67-91.
- 33. Borst-Eilers E. Beleidsvisie hemofilie. Staatscourant. 1999;161.
- 34. Vat LE, Middelkoop I, Buijck BI, Minkman MM. The Development of Integrated Stroke Care in the Netherlands a Benchmark Study. Int J Integr Care. 2016;16(4):12.
- 35. Service Public de Wallonie (2017). Décret relatif au prix d'hébergement et au financement de certains appareillages des services médico-techniques lourds en hôpital. Namur : Parlement de la Communauté française. Retrieved from : http://www.gallilex.cfwb.be/document/pdf/44449 000.pdf