KCE REPORT 359

Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
Belgian Health Care Knowledge Centre

TOWARDS INTEGRATED CARE IN BELGIUM: STAKEHOLDERS' VIEW ON MATURITY AND AVENUES FOR FURTHER DEVELOPMENT

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HEALTH SERVICES RESEARCH

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COLOPHON

Title: Towards integrated care in Belgium: stakeholders' view on maturity and avenues for further development

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LIST OF ABBREVIATIONS

ABBREVIATION	DEFINITION
ACO	Accountable Care Organisation
APM	Alternative Payment Method
APR-DRG	All Patient Refined Diagnosis-Related Groups
AViQ	Agence pour une Vie de Qualité
BPCI	Bundled payments for Care Improvement
COCOF	Commission communautaire française
COCOM	Commission communautaire commune
CPC	Comprehensive Primary Care
DIS	Domaines d'innovation stratégiques
DRG	Diagnosis Related Group
EQ-5D-5L	Euroqol 5 Dimensions 5 Levels
EQ-VAS	Euroqol Visual analogue Scale
FFS	Fee-For-Service
GBO	Geïntegreerd Breed Onthaal
GDPR	General Data Protection Regulation
GE	Germany
GGC	Gemeenschappelijke Gemeenschapscommissie
GGZ	Geestelijke gezondheidszorg
GP	General Practitioner
HiAP	Health in All Policies
HRQoL	Health-related Quality of Live
HVBP	Hospital Value-Based Purchasing Program
IC	Integrated Care
ICP	Integrated Care Pilot

IMA – AIM	InterMutualistisch Agentschap – Agence InterMutualiste
IQR	Interquartile range
KPI	Key Performance Indicator
LUSS	Ligue des Usagers des Services de Santé
M	Mean
MPG	Minimale Psychiatrische Gegevens
MPPS	Mixed Provider Payment System
MSSP	Medicare Shared Savings Program
NGACO	Next Generation of ACO
NL	The Netherlands
NZ	New Zealand
OECD	Organisation for Economic Cooperation and Development
OMS	Organisation Mondiale de la Santé
PACIC	Patient Assessment of Chronic Illness Care
PaRIS	Patient-Reported Indicator Surveys
PCSWs	Public Centres for Social Welfare
P4C	Pay-For-Coordination
P4P	Pay-For-Performance
P4Q	Pay-For-Quality
PPM	Provider Payment Method
PREMS	Patient-Reported Experience Measures
PROMS	Patient-Reported Outcomes Measures
QOF	Quality and Outcomes Framework
RIZIV – INAMI	National Institute for Health and Disability Insurance (‘Rijksinstituut voor Ziekte- en Invaliditeitsverzekering’ – ’Institut National d’Assurance Maladie-Invalidité’)

RSW	Réseau santé wallon
SCIROCCO	Scaling Integrated Care in Context
SD	Standard deviation
SP	Spain
UK	United Kingdom
USA	United States of America
VBHC	Value-Based Health Care
VGC	Vlaamse Gemeenschapscommissie
VIVEL	Vlaams Instituut Voor de Eerste Lijn
VPP	Vlaams Patiëntenplatform
VSB	Vlaamse sociale bescherming
VSM	Viable Systems Model
WHO	World Health Organisation

GLOSSARY

A territorial approach of integrated care

A territorial approach of integrated care consists of working on integration on the basis of a territory in which a population lives and health or social care organisations provide services. In this report we propose a territorial approach at two levels: a place-based approach at neighbourhood or community level, and a governance of organisation at integrated local health system level (see after).

Integrated local health system

"*Integrated (local health) care systems (ICSs) are partnerships that bring together providers and commissioners of NHS services across a geographical area with local authorities and other local partners to collectively plan health and care services to meet the needs of their population. The central aim of ICSs is to integrate care across different organisations and settings, joining up hospital and community-based services, physical and mental health, and health and social care.*" (A. Charles)[1]

Population based approach

"*An approach aimed at improving the health of an entire population. It is about improving the physical and mental health outcomes and wellbeing of people within and across a defined local, regional or national population, while reducing health inequalities. It includes action to reduce the occurrence of ill health, action to deliver appropriate health and care services and action on the wider determinants of health. It requires working with communities and partner agencies.*" (J. Holmes)[2]. In this report population is defined at territorial level (community or integrated local health system level), or in function of specific risk (trough stratification of the population).

Place-based approach

"*'Place-based approaches' target the specific circumstances of a place and engage local people from different sectors as active participants in development and implementation*." (Victorian Government)[3] In this report, we propose a place-based approach in connection with primary care at a neighbourhood or community level.

■ SCIENTIFIC REPORT

1 INTRODUCTION

Authors: Benahmed N, Lefèvre M, Van den Heede K, Bourgeois J

1.1 What is integrated care?

To face challenges such as the aging population and a growing prevalence of chronic conditions, the healthcare system has to shift from an organisation of services predominantly focused on acute episodes and communicable diseases to person-centered care. Integration of services has been promoted as a mean to make this transition and to enable to achieve the "Quintuple Aim"[a] of healthcare improvement.[8]

Because integrated care is an evolving and multi-faced concept, many terms have been used to refer to it such as 'managed care', 'coordinated care', 'collaborative care', 'disease management', 'case management, 'transmural care', 'continuity of care', 'seamless care', 'service-user-centred care'. In addition, integrated care is an umbrella concept capturing numerous perspectives (population, care professionals, policy-makers, community…).[9]

Consequently, there is no consensus definition of integrated care. Box 1 provides a set of definitions according to these several perspectives. In this study, we use the WHO definition.[10] [11] In addition, we use the definition of health proposed by Huber et al. (2011) [12] i.e. the ability to adapt and self-manage in the face of social, physical, and emotional challenges.[12]

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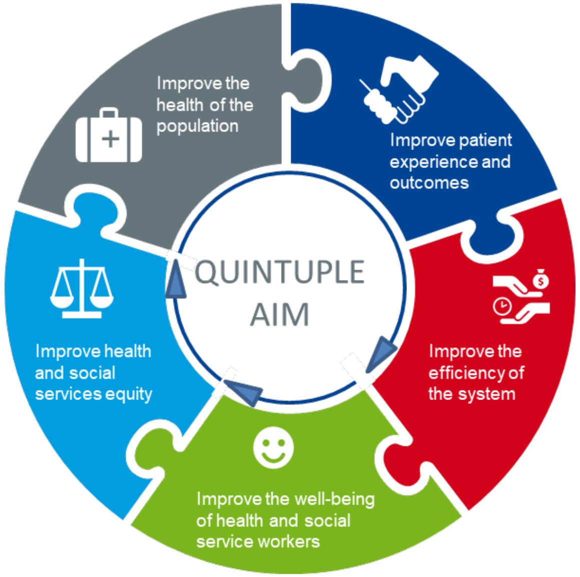
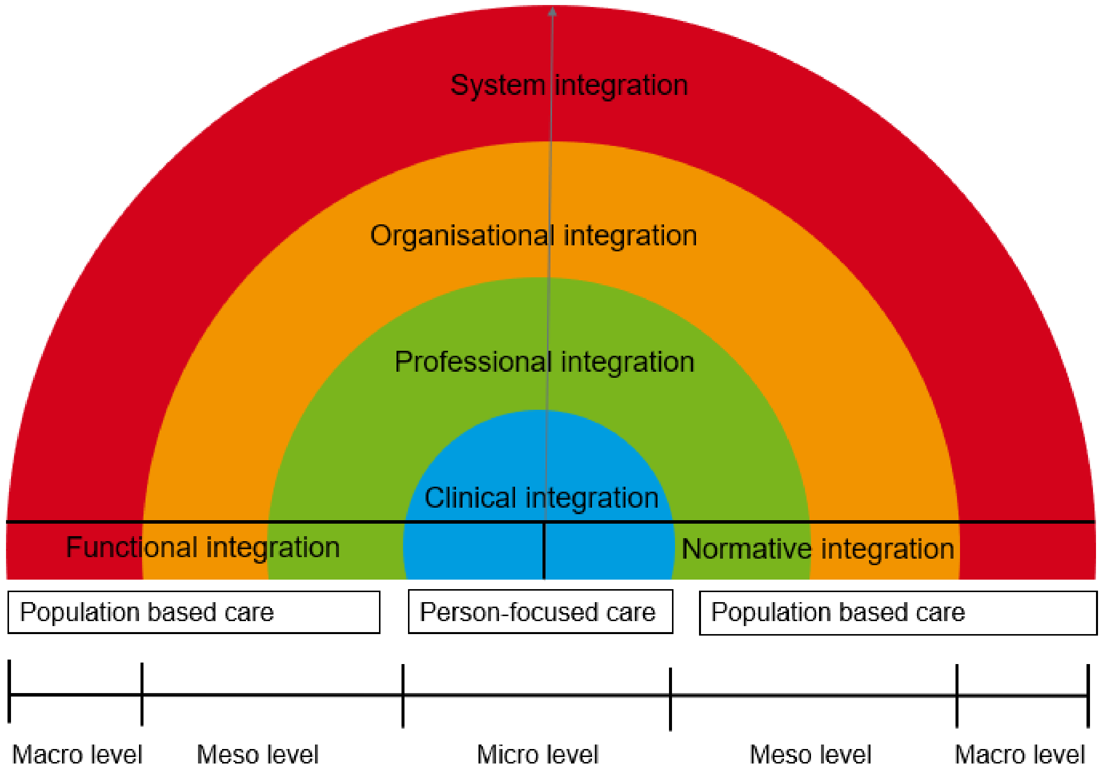
[a] In 2007, the Institute of Healthcare Improvement introduced the "Triple Aim" (improved patient experience, better health-related outcomes, and lower costs) as key objectives of the health care transformation.[4]. Some years later, the clinician's engagement and his/her wellbeing is recognised as key to be able to achieve the Triple Aim, resulting in the "Quadruple Aim".[5] Very recently, reinforced by the COVID-19 pandemic, the concept evolved to "Quintuple Aim" including equity as an explicit independent aim.[6]

Figure 1 – The Quintuple Aim of healthcare improvement[8]



To understand the complexity of integrated care, several taxonomies have been proposed.[11, 13, 14] One of these conceptual frameworks is the Rainbow Model (see Figure 2). It was originally designed for primary care placing the person-focused and the population-based care as the main purpose of integrated care. It is represented by the figure below. In this figure the vertical axis illustrates that integration is need at different level: at micro-level (clinical integration i.e., the level of interaction with the patient or the operational level), at meso-level (professional and organisational integration i.e., the level of support and management structured at the local health system level or the strategic level) and at the macro-level (system integration i.e., the level of the policy framework or the policy level). Thus, how a package of care and activities are delivered depends on how the professionals involved in the delivery work together. The latter depends on how the organizations from which the professionals come work together. In other words, clinical integration depends on professional integration, which in turn depends on organizational integration. To ensure effective connectivity between the various levels, the horizontal axis, represents a continuum between functional integration (seeks to improve integration through typical levers such as information systems, payment methods, definition of new professions, definition of territories, etc.) and normative integration (shared cultural values). These different types of integration must reinforce each other to achieve systemic integration.

Figure 2 – Conceptual framework for integrated care based on the integrative functions of primary care[14]



Box 1 – Main definitions of integrated care

Health system-based definition (WHO – Europe)

"Integrated health services are health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course"[15]

"Integrated health services delivery is defined as an approach to strengthen people-centred health systems through the promotion of the comprehensive delivery of quality services across the life-course, designed according to the multidimensional needs of the population and the individual and delivered by a coordinated multidisciplinary team of providers working across settings and levels of care. It should be effectively managed to ensure optimal outcomes and the appropriate use of resources based on the best available evidence, with feedback loops, to continuously improve performance and to tackle upstream causes of ill health and to promote well-being through intersectoral and multisectoral actions".[11]

Process-based definition

"Integration is a coherent set of methods and models on the funding, administrative, organizational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life, consumer satisfaction, and system efficiency for people by cutting across multiple services, providers, and settings. Where the result of such multi-pronged efforts to promote integration leads to benefits for people, the outcome can be called integrated care" (adapted by WHO (2016)[11] from Kodner et al. (2002)[16]).

Whole of systems' definitions

"The search to connect the healthcare system with other human service systems (e.g., long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency)".[17]

"Care integration relates to connectivity, alignment of, and collaboration between social services, public health, citizens and communities" (van Duijn et al. (2018)[18] in Kaehne and Nies (2021)[19] p4).

Definition from the chronic care perspective

"Initiatives seeking to improve outcomes for those with (complex) chronic health problems and needs by overcoming issues of fragmentation through linkage or coordination of services of different providers along the continuum of care".[20]

Health care manager's definition

"The process that involves creating and maintaining, over time, a common structure between independent stakeholders (and organisations) for the purpose of coordinating their interdependence in order to enable them to work together on a collective project".[21]

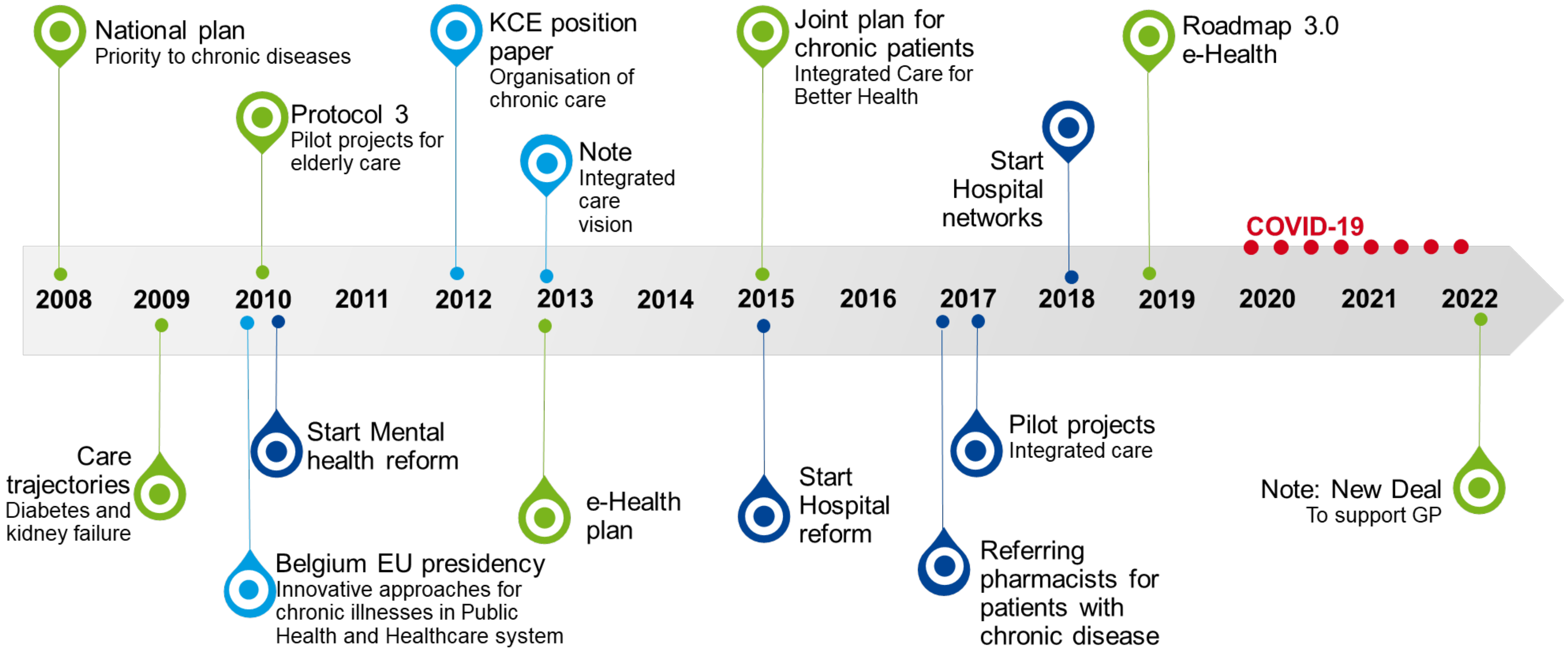
User-led definition

"My care is planned with people who work together to understand me and my carer(s), put me in control, coordinate and deliver services to achieve my best outcomes".[22]

1.2 Integrated care in Belgium

The realisation of 'integrated care' has been and still is an aim of the Belgian federal and federated governments (more in-depth analysis of policy documents is provided in chapter 2)[23-28]. Figure 3 shows the evolution from 2008.

Figure 3 – Timeline - development of integrated care federal policy in Belgium



In 2008 the federal minister launched a National Plan: "priority for chronic diseases", which focused on providing the patient with good information and enhancing the (financial) accessibility of health care.[29] In the beginning, the focus of Belgian integrated care policy initiatives was on defined patient groups, either with a 'single' chronic disease, such as cancer,[30] diabetes or chronic renal failure,[31] or people with mental health care problems (Article 107 networks)[32], or older persons with chronic, complex needs (Protocol 3 pilot[33, 34]). All these initiatives had/have objectives in line with the 'integrated care concept': improving multidisciplinary collaboration, linking the hospital sector with ambulatory care, and focusing on the patient's needs. The concept of organising the provision of care in a geographically defined area was present in the establishment of local multidisciplinary networks for diabetes and renal insufficiency trajectories, and was a clear prerequisite of the mental health care reform. In 2010 under the Belgian EU presidency a Conference "Innovative Approaches for Chronic Illnesses in Public Health and Healthcare Systems" was held and incited the federal minister to request a position paper to the KCE on organisation of chronic care. Following the publication of the KCE position paper in 2012,[35] including 20 recommendations and 50 action points, all governments involved in health care agreed upon a shared vision and launched in 2015 a Joint Plan for people with a chronic disease: "Integrated Care for Better Health".[24] The objectives of the Joint Plan were formulated as the Triple Aim, though there was also the notion of professional wellbeing and reducing health inequalities, though not yet explicitly mentioned as the "Quintuple Aim". The Plan identifies 18 components of integrated care, called "changes needed to support the development of integrated care", grouped in 4 lines of action (see Figure 4).

This Joint Plan was concluded during the implementation of the Sixth State Reform in which federated entities received more competencies regarding health care. As a consequence, all governments faced organizational challenges. Meanwhile, there were also sector reforms launched, e.g. in 2015 the reform of the hospital landscape and financing[36] and the function of referring pharmacist was created. The mission as a "referring pharmacist" is to keep the patient's medication regimen up to date and to make it accessible to other health care providers who have a therapeutic relationship with the patient. The target patient groups are chronically ill patients with a global medical record (dossier medical global, global medisch dossier), diabetic patients receiving education from the pharmacist, chronically ill patients with multiple medications, patients with a specific need for pharmaceutical care follow-up based on specific pathologies or physiological conditions, (potential) iatrogenic risks, (suspected) non-adherence to medication, or a need for specific support for social reasons.

Following the Joint plan, twelve pilot projects on integrated care (6 in Flanders, 5 in Wallonia, and 1 in Brussels) were launched in 2018, to test and develop initiatives enhancing integrated care in a delineated geographical area.[37] These pilot projects are coordinated by the inter-administrative cell – chronic diseases[b] (federal). They have been evaluated ad interim by an interuniversity consortium "Faith.be" concluding very promising results over the two first years. However, further follow-up is needed because the implementation of actions was not yet fully operational at the time the evaluation stopped.[38] Annual evaluation of the implementation will be performed by the interadministrative cell, at least till end 2022. Decisions on possible continuation are awaited.

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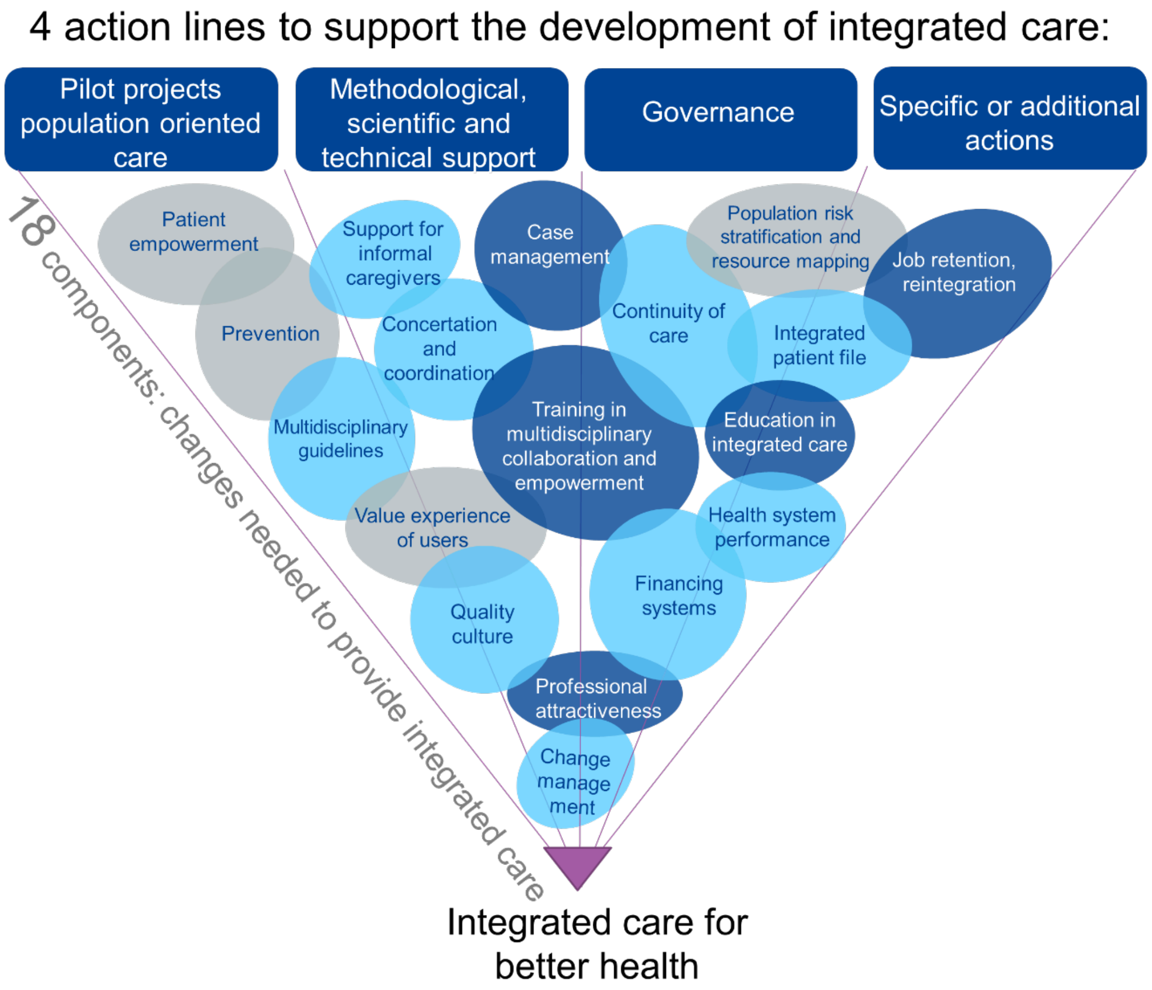
[b] Interadministrative Cell " chronic diseases" gathers representatives of the Federal Public Service – Public Health and the National Institute for Health and Disability Insurance (INAMI/RIZIV)

The breadth of ambition for integrated care in Belgium has evolved, from more single disease initiatives or delineated target groups (cancer, vulnerable older people with complex needs, diabetes…) to include the aspect of a population health approach (e.g. in the Joint Plan integrated care for chronic diseases, the population aspect is expressed by categorizing people based on needs– Kaiser Permanente[39]). Extending the benefits of integrated care to the general population also gives more attention to prevention, multiple determinants of health, and equity in health.[40] Hence, the explicit use of the term ‘Quintuple Aim’ found entrance in 2021 (see Figure 1. A recent evaluation of equity in Belgium concluded that the current protection measures are not sufficient to counter unmet needs, and there is especially inequity in specialist care and dental care.[41] In addition, another evaluation on the performance of care in chronic patients in Belgium[42] showed that coordination, concertation and appropriate follow-up are points of attention.

The chapter 2 provides an in-depth analysis of the aims in the policy documents from federal and federated entities.

Figure 4 – The components to be developed for integration of care[24]



1.3 Scope of the project

This study was commissioned by the Federal Minister of Health and Social Affairs Frank Vandenbroucke with objective to assess the maturity of integrated care in Belgium as experienced by stakeholders (care professionals/managers/policymakers), as well as to identify stakeholder-driven action points to be able to formulate recommendations for future integrated care policy. Consequently, a large part of the research is **focused on what the policy level** can do to improve integrated care in Belgium.

To reach this goal, five research questions were formulated:

1. What aims for integrated care are mentioned in Belgian governmental policy documents?
2. a. What is the perception of professionals about the current state/maturity of integrated care in Belgium?
   b. What is the current perception of patients on their care experience?
3. Based on barriers and facilitators experienced by Belgian stakeholders which actions are put forward in developing and implementing integrated care?
4. a. Which is the main barrier for the implementation of integrated care identified by stakeholders?

   b. And how is this main barrier discussed in the international literature?
5. Which actions are, according to Belgian stakeholders and experts, needed to improve further development and implementation of integrated care in Belgium?

Theoretical foundations of integrated care have been extensively studied in the literature. In particular, behavioural economics[43], new institutional economics[44], transaction cost theory[45] and network theory [46]can bring interesting insights to build integrated models of care. However, an analysis of these theories was considered out of the scope of this report. The interested reader is referred to Amelung (2013)[47], Schrijvers (2016)[48] Amelung et al. (2021)[13] and Burns et al. (2022).[49]

1.4 Methods

General overview of methods used in the current report

To answer the above research questions, a multimodal approach was used including qualitative methods, quantitative analyses of validated tools, and a narrative review of the literature, all in a linear approach (consecutive steps). The timing of this project, to answer all five research questions, was set at 10 months (September 2021- June 2022). Therefore, it was necessary to select methods (tools, instruments) pragmatically, i.e. based on feasibility. When more time was available alternative methods such as a development evaluation[50] could have been considered as integrated care in Belgium is an innovating initiative under development.

Table 1 gives an overview, though all methods are described in detail in each chapter.

Table 1 – Overview of research questions and methods

Research question	Main methods	Chapter
1. What aims for integrated care are mentioned in Belgian governmental policy documents?	Qualitative analysis of policy documents published from 2012 to September 2021	Chapter 2
2. a. What is the perception of professionals about the current state/maturity of integrated care in Belgium? **2. b. What is the current perception of patients on their care experience?**	a. Professional perception: Online survey on the maturity of the system i.e. the 12 dimensions in the Scirocco tool as well as the achievement of policy aims b. Patient perception: online survey with a validated tool on the experience of care (PACIC)	Chapter 3
3. Based on barriers and facilitators experienced by Belgian professionals which actions are put forward in developing and implementing integrated care?	Structured discussion groups: 6 in Flanders, 6 in Wallonia and 4 in the Brussels region	Chapter 4
4. Which is the main barrier for the implementation of integrated care identified by professionals? And how is this main barrier discussed in the international literature?	The main barrier is chosen based on a narrative review of the literature about the Belgian context as well as on the input from the online survey on the maturity of integrated care Rapid review (narrative)	Chapter 5
5. Which actions are, according to a group of Belgian experts, needed to improve further implementation of integrated care in Belgium?	Structured discussion groups (World Café) with experts	Chapter 6

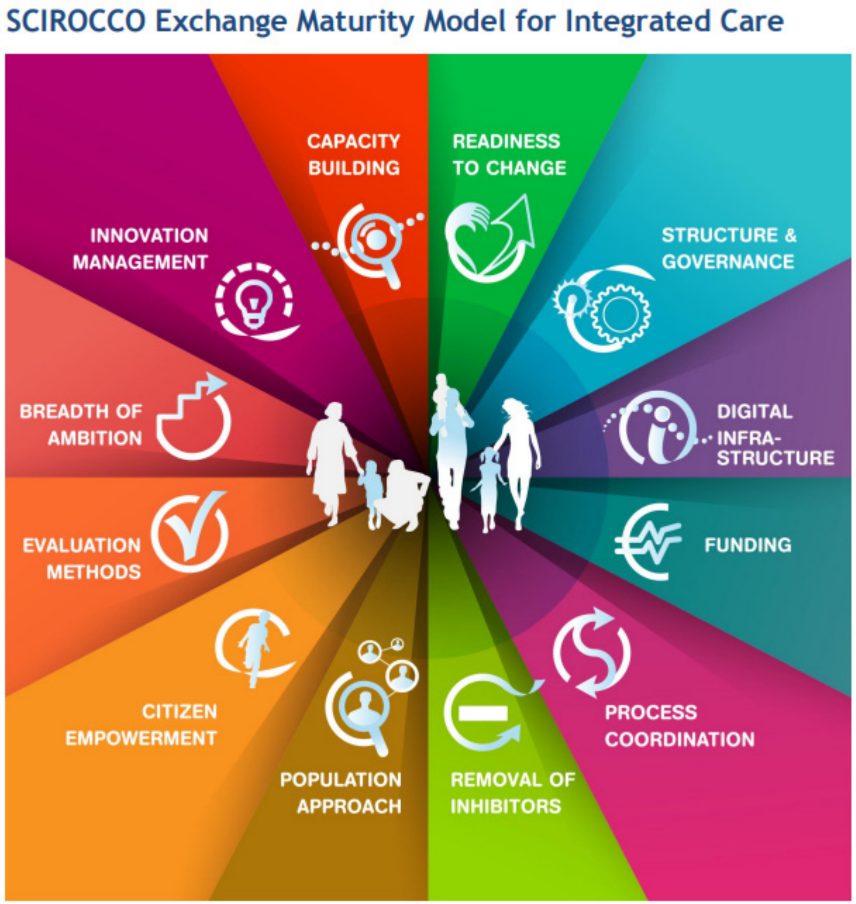
The stakeholder involvement

Stakeholders were invited to participate to the data collection for research questions 2 to 5. Invitations to participate were sent to health, social and welfare sectors. As we used a snowballing system for the recruitment of participants, some stakeholders could have been consulted for several research questions. As participation on research question 2 was anonymous, it is however impossible to know how many participants were also involved in other research questions.

The SCIROCCO tool

One aspect of the methods (i.e. the Scirocco tool) is highlighted in this chapter because it is used throughout the report. The SCIROCCO tool is an online self-assessment tool to assess a region’s readiness for integrated care.[51-53] It builds on the conceptual Maturity Model for Integrated Care developed by the B3 Action Group on Integrated Care of the European Innovation Partnership on Active and Healthy Ageing (Figure 5). There are 12 dimensions relevant for integrated care which can each be scored from 0 (low - lack of maturity) to 5 (high maturity). By considering each dimension, assessing the current situation, and allocating a measure of maturity within that domain, a country or region can understand the strengths and weaknesses of their regional context for integrated care and inform national, regional, and local policymakers about potential areas of improvement.

Figure 5 – The 12 dimensions of the SCIROCCO tool based on the Maturity Model



Source: Scirocco Exchange[53]

The tool has been used in several countries (or parts of them) to measure their 'maturity' of integrated care.[51, 54, 55] The Scirocco tool has also been used in five countries as an aid to scale up integrated care projects[56] and in a European project in 12 countries.[57] In Belgium, more specifically in Flanders, there is also an experience in using the SCIROCCO tool.

In this research, the SCIROCCO dimensions will be used to classify 'aims identified in policy documents'; to measure the maturity of integrated care via an online survey of stakeholders, and to structure the discussion groups on barriers, facilitators, and solutions (see Table 1).

Because integrated care is linked to the way health and care are organised, the preferred unit of analysis are sub-territories to analyse intra-regional variation (see map in supplement). Nevertheless, such an analysis requires a resource intensive design (e.g. representative sample at the level of the sub-territories) which was out of scope of the current report. More details on this sub-territory are available in supplement.

2 INTEGRATED CARE AS EXPRESSED IN THE BELGIAN POLICIES

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Key Findings

- This explorative research identified many policy documents, i.e. 120 documents of which 45 were selected as key documents to further analyse the aims related to integrated care.
- The large number of policy documents is due to the fact that the 'integrated care' concept touches upon many different sectors having their own stakes and policy plans (e.g. health care sector, innovation, social care sector, etc.), reinforced by the fact that competences in Belgium are divided (not always in a homogenous way) between federal and federated entities.
- Policy aims were identified for all the Scirocco dimensions.
- Despite the scattered competencies, a certain level of coherence within and between policies from federal and federated entities was identified. They all agree on the need for integrated care, and see it as a way forward for health and social care services and institutions to face the growing societal burden of chronic disease management and ageing of the population:
  - Most public authorities adopt the strategy of a participatory approach as a key avenue to guide and achieve the desired changes in the health care system. Pilot-projects are often used to launch and test new policies.
  - The explicit use of the 'integrated care' concept, together with the Triple Aim (2+), Quadruple Aim or Quintuple Aim is most visible in federal and flemish policy documents, though aims related to integrated care, are observed in the different regions.
  - Overall coherence is noticed in several aims. For example: a. to change the current healthcare paradigm, b. to include healthcare in all policies, c. to define territories and networks (e.g. hospital networks), d. to reinforce patient empowerment and autonomy, e. to reinforce primary care, f. to develop a multidisciplinary electronic patient file, g. to facilitate data sharing, h. to develop some new functions to coordinate care, i. to improve continuity of care (to work across the lines), j. to reinforce the collaboration between health and social sector, k. to support technological and social innovation by building bridges between the health industry, care institutions and patients, l. to support knowledge sharing, and m. to ensure the recruitment of skilled staff…
- The 6th State Reform in 2014, resulted in a further fragmentation of competencies with as a result multiple authorities being (partly) responsible for the same sector. Therefore, the need for collaboration, and joint plans in which there is agreement on common objectives, increased (e.g. the Joint Plan: Integrated Care for people with a chronic disease (2015), the Hospital Reform Plan (2015), e-Health Roadmap (2019)). These joint plans, often initiated by the federal level, but in agreement/collaboration with the federated entities, had an important impact on other policy documents.
- There are also differences between the regions in the policy implementation, i.e. the way to arrive at those common aims (e.g. defining territories to establish networks, or simplifying governance structure).

2.1 Introduction

This first part of the study consisted in looking up policy documents and screening them for aims related to integrated care (IC). The research question was formulated as follows: What aims for integrated care are mentioned in Belgian governmental policy documents?

The rationale behind this review is:

1. To produce an overview of the different policy visions on integrated care;
2. To draw up the list of aims formulated in policy documents which can then be used, as part of a second phase, to gage stakeholders' views on integrated care in terms of achieving these objectives (this is a preliminary step for the online survey on the maturity of the Belgian health care system see section 2.

2.2 Methods

We conducted a documentary analysis of key federal and regional policy documents in the field of IC in Belgium (plans, strategic plans, laws, and decrees). The analysis is limited to the identification of policy aims and their congruance between federal and federated entities. Developing theorietical framework to capture the change feature and the dynamic of policy-making is out-of-scope of this study.[58]

The focus was on documents published after 2012, which is the year the KCE published a position paper on the organisation of health care for chronic patients. However, we sometimes cite in the results section some previously published documents that have played a contextual role in the chronology of IC development in Belgium. We do not include in our list of aims those aims formulated in the retained contextual documents.

Research strategy

In September 2021, we first consulted the websites of the different federal and regional governments or ministries, as well as other relevant websites of public authorities (e.g., RIZIV/INAMI websites, legal websites such as the Belgian Monitor, etc.), to find relevant documents on IC. This first search allowed us to draw up a preliminary list of 42 documents. This list was submitted to 20 key stakeholders who were asked to complement it with additional documents. The stakeholders were selected based on a stakeholder mapping indicating their high level of knowledge and influence in the field of integrated care (policy makers, executives, researchers). Fourteen out of the twenty responded and suggested to add 78 documents: none for the Federal Government, 29 for Flanders, 20 for the Brussels region, 22 for Wallonia, and 7 for the German speaking Community. This led to a total number of 120 policy documents.

Selection criteria of key policy documents

The selection criteria for **key policy documents** are (strategic) plans, laws and decrees published after 2012:

1. in which the concept of IC is discussed: for instance, the 2015 Joint Plan from the Federal Government clearly presents the federal vision on IC as a model to drive change in the healthcare system (pp. 7-14).
2. in which some aims related to one or more of the SCIROCCO dimensions of IC are formulated: for instance, the federal or regional e-Health plans contain some aims but only those included in the "digitalisation" dimension of IC.
3. that contribute to promoting the development of IC in Belgium amongst stakeholders, from 2012 until now.

Documents that concern children and adolescents, or that were not issued by Belgian policy authorities, like the WHO or other international organisations, were excluded. In addition, other documents considered for their **contextual** purpose only, were sometimes used to complete our description or analysis of the historical and policy development of IC in Belgium (not to identify aims): an example is the KCE's 2012 position paper which is not a policy document, but that played a central role in the development of IC in Belgium.

Note that the policy documents related from the German-speaking community authorities were identified but not further analysed because of an ongoing similar study performed by the German-speaking community authorities, therefore the analysis is limited to the description of the documents, and no new aims were identified (see Box 2).

Analysing the evolution of IC at the federal and regional levels

The key documents were used to get an overview of the chronological development of IC at different levels of Belgian policy and legislative authorities.

Data extraction and analysis of the policy aims

Due to time and language constraints, the identification and analysis of policy documents were done by language and assigned to three researchers of the UCL-shiftN consortium: the NL documents by SOdB, the FR documents by ASL (Federal and Wallonia) and OS (Federal, Brussels and German community). OS merged the results from the different researchers, in the different languages, into one final document.
To identify the different policy aims formulated in the selected documents, we first examined them by doing a quick search for certain central keywords such as "integrated care", but also "care pathway", "coordination", "shared electronic records", and "networks". The concepts of care pathways, coordination, shared electronic records and networks are in fact often associated in the literature on integrated care. Patient record, was searched as we considered this as a (electronic) tool to share information between professionals.[59] This helped us identify the sections of the documents where IC-related aims were mentioned; identified passages were then examined in detail and copy-pasted into a master document. The validation of the identified aims was done by consensus between researchers of the consortium.
Once identified, each policy aim was classified according to the 12 dimensions of the Scirocco self-assessment tool (see section 1.4).[53] This tool was selected because it is developed to assess the maturity of a region/country's healthcare system for integrated care (see chapter 3). By classifying aims according to the Scirocco dimensions, we were able to create an online survey for the selected stakeholders to take on the maturity of the healthcare system.

2.3 Results

Overall, the entire selection process resulted in 45 retained (out of the 120 identified) sources that were considered as **key documents** (policy or legislative). The documents are categorised per authority (Federal-Flanders-Brussel-Wallonia) andpresented by type of document (policy plans, by legislative documents). In each category, the documents are then presented by chronological order.At the federal level, we identified 7 policy and 4 legislative documents. For Flanders, we identified 14 policy and 6 legislative documents. For Wallonia, we identified 5 policy and 2 legislative documents. For the Brussels region, we identified 4 policy and 3 legislative documents.

In a first section, the **key policy documents** are described by entity (federal or federated). When documents stem from a joint effort among all entities involved (i.e., joint agreement within the interministerial Conference), they are classified as ‘federal’. This is the case for most federal policy documents. Furthermore, we made the distinction between policy documents, in which each authority formulates its own vision/outlook, and legislative documents (royal or regional decrees) that more specifically address the implementation of policy and primarily focus on a specific sector (hospitals, primary care, e-Health…).

In a second section a description is provided of the aims as they have been identified in the different policy documents, categorised according to the 12 different Scirocco dimensions. A table for each dimension summarises the aims identified from the 45 selected documents categorised (grouped) and listed by governing authority.

2.3.1 Overview of the selected policy documents by level of authority

2.3.1.1 Federal documents

The vision of the Federal Government about integrated care formulated throughout different policy documents was ranged based on the political "event" (Inter-Ministerial Conferences), the date of their publication, and their legal implementation throughout decrees.

The development of the federal vision about integrated care is marked by the following steps:

1. the formulation, by federal authorities of its national plan 'priority to chronic illnesses' (2008);
2. the conference, during the Belgian presidency of European Union intituled 'innovative approaches for chronic illnesses in Public Health and Healthcare Systems' (2010);
3. the publication, at the demand of the Federal Government, of the 'position paper' by the KCE (2011) that will be largely considered as a reference document for the next steps;
4. the creation, after the inter-ministerial Conference (December 2012) of the inter-cabinets work group 'Chronic illnesses';
5. the publication, by this last work group of an orientation note on an integrated vision on care in chronic disease ('Une vision intégrée des soins aux maladies chroniques en Belgique' / Geïntegreerde visie op de zorg voor chronisch zieken in België – 2013);
6. the discussion of this note during the national Conference of the 28th of November 2013;
7. the sixth Belgian state reform (2014), that led to further decentralisation in the matters of public health and healthcare competences, the different federated governments formulate their respective aims in mater of IC in their respective governmental agreements;
8. the validation, by the different health ministers of a Joint plan in favour of chronic patients, including a shared vision (2015);
9. the vision of the Federal Government on IC is formulated across 7 policy (1-7) and 4 (8-11) legislative documents.

A. POLICY DOCUMENTS

1. **Note d'orientation 'Une vision intégrée des soins aux maladies chroniques en Belgique' / Oriëntatienota : 'Geïntegreerde visie op de zorg voor chronisch zieken in België' (inter-cabinet working group on "chronic diseases" of the Interministerial Conference Public Health – 2013)[60]**

   Following the National Conference held in November 2013 on the organisation of care for the chronically ill, this guidance note published by the inter-cabinet working group 'Chronic Diseases' proposes a set of 20 actions to be carried out with a view to develop a national action plan for people with chronic diseases. This is the first major document published during the period under review by the Federal Government and is the result of joint work by the interministerial conference. This policy paper is a direct follow-up to the national 'Priority to Chronically Ill Patients' plan of 2008 which included the establishment of "Het Observatorium voor de chronische ziekten/ L'Observatoire des maladies chroniquesin RIZIV – INAMI". The document can be viewed as a translation of the KCE position paper into a policy document.[35] All six areas of intervention developed in the guidance note, as well as most of the 20 actions (interventions) proposed, either directly or indirectly relate to the different dimensions of IC defined by Scirocco.

2. **'Plan conjoint en faveur des malades chroniques. Des soins intégrés pour une meilleure santé' / 'Gemeenschappelijk plan voor chronisch zieken. Geïntegreerde zorg voor een betere gezondheid' (Interministrial Conference Pubic Health - 2015) [24, 61]**

   This national plan, formulated by the formulated jointly by all health authorities, following the 2013 guidance note, was approved by the Interministrial Conference (federal and federated entities), and is considered as a shared vision for a nationwide implementation of IC.

The main objective of this Joint Plan is: “to improve the quality of life of the Belgian population, with a particular focus on people suffering from one or more chronic diseases”. To reach this objective, adjustments are required within the health care system following a Triple Aim principle: improve the health status of the population in general, focusing specifically on patients with chronic diseases; improve the quality of care, as well as the efficiency of the overall system, while supporting work-life balance for care professionals and promoting equity (Triple Aim 2+).

The target population is clearly stated as people who need long-term care because of a chronic condition.

The vision behind this plan is the integration of (para)medical, psychosocial, nursing and wellbeing care, in a way that allows for the provision of a set of coordinated services. Such a vision requires a multi-level integration: at the patient level, at the care provision level, at the population level, and at the policy intervention level.

This Joint Plan is structured across four action lines and 18 components (see Figure 4) which can be viewed as the central elements composing the IC plan to be implemented in Belgium. To achieve this plan, several pilot projects were rolled out in different regions of the country.

3. **‘Plan d’approche réforme du financement des hôpitaux’ / ‘Plan van aanpak hervorming ziekenhuisfinanciering’ (Federal Minister of Public Health and Social Affairs Maggie De Block – 2015)[36]**

This plan was published in 2015. It promotes a “new concept” for hospitals that is clearly aligned with some of the components of IC identified in the previous Joint Plan. Hospitals will become a central link within a “care & cure network”, a new care landscape designed by other federal reforms.

An “adapted hospital” must collaborate with other hospitals and care organisations and become part of a larger geographical collaboration to better coordinate the provision of transmural care. In this context, different types of "care & cure networks" are necessary, founded on local and regional collaboration and task division agreements. Different models must be tested by rolling out pilot-projects, the fruit of bottom-up and top-down efforts. In March 2017, the federal health minister launched 12 pilot projects to test various forms of hospitalisation at home: 5 in Flanders, 5 in Wallonia and 2 in the Brussels region.[62]

But the central objective of this plan is to reform hospital financing. The idea is to outline a more rational use of the budget allocated to health care and create more and better value (value-based care): by limiting the length of hospital stays and reducing the number of acute care beds. To achieve its objective, the plan proposes a development schedule with milestones set between 2015 and 2018 for each category of care, the first of which is reducing variability of care (more details on hospital stays with a large variabilty is available in KCE report 320). [63]

The network-based collaboration between different care organisations must also be supported by the development of electronic medical records, accessible by all health and social care professionals.

4. **‘Projets-pilotes soins intégrés en faveur des maladies chroniques (Guide) / Pilootprojecten geintegreerde zorg voor chronisch zieken (Gids)’ (Interministrial Conference Public Health – 2016)[64]**

In January 2016, the federal and federated authorities published a Guide to help health and social care stakeholders involved in implementing pilot projects, develop new models of care and new organisational models of IC for chronically ill patients in a defined area. The objective is to better meet patients’ needs, improve the health status of the population within the allocated budget and at the best cost, while supporting work-life balance for care professionals and promoting equity (Triple Aim +2).

The Guide also exposes the four-phase process for the development and deployment of pilot projects: a preparation phase, a conceptualisation phase, a selection and implementation phase, and a final extension and consolidation phase based on the evaluation results of the execution phase. For each phase, the federated authorities are allowed to specify additional conditions for the potential candidates, such as mandatory partners, specific areas of focus, geographical care zones, etc.

5. **‘Protocole d’accord sur la répartition du nombre maximum de 25 réseaux hospitaliers cliniques locorégionaux sur les entités compétentes pour l’agrément / Protocolakkoord over de verdeling van het maximaal aantal van 25 locoregionale klinische netwerken over de overheden bevoegd voor de erkenning’ (Interministerial Conference Public Health – 2018)** [65]

    This document is an addition to the Hospital Reform Plan. It seeks to reorganise the hospital landscape through the creation of up to 25 local-regional clinical hospital networks.

6. **‘Plan d’actions e-Santé 2019-2021’ / ‘Actieplan e-Gezondheid 2019-2021’ (Interministrial Conference Public Health – 2019)**[66]

    In 2019, a follow-up plan to the previous ‘e-Health 2013-2018 Plan’ was approved by the Federal Government and federated authorities, and their respective public health ministers. This plan covers the two-year period from 2019 to 2021 but as a continuation of the previous national e-Health plan. The main purpose is to align Belgium to international health ICT standards.

    The plan is structured around 40 projects which fall under two categories: conceptual projects (for example, the project on informed consent), and operational projects (for example, rolling out the use of Electronic Patient Records in all hospitals). Operational projects are understood to be the translation of certain concepts or ideas of models into tangible and applicable services. The projects are classified by clusters (different from the previous plan): foundations, transversality, support, operational excellence, health professionals and care organisations.

    The projects are organised into three categories: federal only, federated authorities only, and interfederal with equal participation from the federal and regional authorities. Projects will be categorized based on which entity has decision-making competences or provides the funding or functional support. Amongst the 40 projects listed in the document, only some revolve around the development of IC, and most fall under the last cluster ‘health professionals and care organisations'.

7. **‘Accord de gouvernement’ / ‘Regeerakkoord’ (Belgian Federal Government- 2020)**[67]

    The Federal Government’s declaration of 30 September 2020, espresses the ambition to continuously improve the healthcare system in terms of quality and accessibility, and to adapt it to the new needs of the population. There is the initiative to substantially increase transparency regarding the quality of the care provided, both intramuros and extramuros (the creation of a data protection authority responsible for the centralisation of health databases). Regarding funding of care, it will be based partly on the *legal growth standard* (*norme légale de croissance* / legale groeinorm) and will have to allow for the funding of new care initiatives to meet health objectives, including the promotion of IC as well as strengthening the inflow and reducing the outflow of of health personnel. The government also plans to continue with reforms already underway, specifically, the hospital reforms. Importantly, the Federal Government wants to update the Joint Plan of 2015 to create an ambitious inter-federal plan (explicit mention of the Quadruple Aim). More details on the the **Federal minister’s policy for public health was published in the general policy note in november 2020.**[26]

B. LEGISLATIVE DOCUMENTS

8. **‘Arrêté royal modifiant l'arrêté royal du 15 décembre 2009 fixant les conditions dans lesquelles l'assurance obligatoire soins de santé et indemnités accorde un financement aux services intégrés de soins à domicile / Koninklijk besluit tot wijziging van het koninklijk besluit van 15 december 2009 tot vaststelling van de voorwaarden waaronder de verplichte verzekering voor geneeskundige verzorging en uitkeringen een financiering toekent aan de geïntegreerde diensten voor thuisverzorging’(National Institute for Health and Disability insurance - 2013)**[68]

    In June 2013, the Federal Government published a royal decree amending the previous decree of 15 December 2009 setting out the conditions under which the RIZIV-INAMI can fund approved integrated home care services, which were themselves created by the royal decree of 8 July 2002.[69] These conditions include the coverage of a **defined geographical care zone** and a set of missions specified in the previous decree.

9. **'Arrêté royal fixant les conditions dans lesquelles le Comité de l'assurance de l'Institut national d'Assurance Maladie Invalidité peut conclure des conventions pour le financement de soins alternatifs et de soutien aux soins, multidisciplinaires et intégrés, à des personnes âgées fragiles' / Koninklijk besluit tot vaststelling van de voorwaarden waaronder het Verzekeringscomité van het Rijksinstituut voor Ziekte- en Invaliditeitsverzekering overeenkomsten kan sluiten voor de financiering van alternatieve en ondersteunende, geïntegreerde en multidisciplinaire, zorg voor kwetsbare ouderen' (National Institute for Health and Disability insurance – 2013)**[70]

   From 2005 to 2013, the government expressed its willingness to experiment with innovative forms of care and care support for frail elderly people, to allow for them to live in their own homes for a longer period of time and avoid admission to a residential setting, or at least postpone or mitigate the transition. A first call for pilot projects was launched in 2009, following the publication of the royal decree of 2 July 2009.

   The selected proposals were funded and evaluated under the program name "Protocol 3", and aimed to provide alternative and supportive care programs for vulnerable elderly people in their home environment through 4 models. The project funding remained limited in time and a second (2013) and third call (2018/2019) were launched. In the second call, adjustements in terms and conditions and financing were made only selecting those projects focussing on integrated care (offering certain mandatory services) and transmural offer of care in collaboration with multiple health care professionals also anchoring projects in the network of existing providers around the frail and elderly. (see KCE report 346 for a recent evaluation of the Protocol 3 project).[34]

10. **'Arrêté royal fixant les conditions et les modalités de la mise en oeuvre de la concertation médico-pharmaceutique et modifiant l'arrêté royal du 3 juillet 1996 portant exécution de la loi relative à l'assurance obligatoire soins de santé et indemnités, coordonnée le 14 juillet 1994 / Koninklijk besluit tot vaststelling van de voorwaarden en nadere regels waaronder het medisch-farmaceutisch overleg wordt toegepast en tot wijziging van het koninklijk besluit van 3 juli 1996 tot uitvoering van de wet betreffende de verplichte verzekering voor geneeskundige verzorging en uitkeringen, gecoördineerd op 14 juli 1994' (National Institute for Health and Disability insurance – 2015)**[71]

    This royal decree, published in April 2015, sets the conditions for the organisation of a local medico-pharmaceutical consultation, bringing together general practitioners and pharmacists involved in the provision of patient care. These consultation meetings focus on the difficulties encountered in their daily practice, with a view to making recommendations for implementing proposed solutions. The meetings are chaired by a doctor and a pharmacist, both appointed by professional organisations representing each of the professions concerned.

11. **'Arrêté royal modifiant l'arrêté royal du 31 juillet 2017 fixant les conditions auxquelles le Comité de l'assurance de l'Institut national assurance maladie invalidité peut conclure des conventions en vue du financement de projets pilotes de soins intégrés / Koninklijk besluit tot wijziging van het koninklijk besluit van 31 juli 2017 tot vaststelling van de voorwaarden waaronder het Verzekeringscomité van het Rijksinstituut voor ziekte- en invaliditeitsverzekering overeenkomsten kan sluiten voor de financiering van pilootprojecten voor geïntegreerde zorg' (National Institute for Health and Disability insurance – 2017)**[72]

    This document specifies the application procedures, selection criteria and four-year pilot period for some twenty pilot projects aimed at testing the development and implementation of innovative forms of integrated care for chronically ill patients within a given geographical area. This text also designates a permanent working group in charge of implementing and monitoring the project experiment. Two more decrees followed this one, in 2019 and 2021, modifying and extending these conditions. In 2018, after studying and selecting several applications, 12 pilot projects were launched ('integrated care projects' – www.integreo.be)) to experiment with new models for the organisation and funding of care for selected groups of chronic patients. A scientific consortium (FAITH.be) was appointed to support and evaluate the projects.[38]

2.3.1.2 Flanders region

Health care reform is a central concern for the Flemish regional government, as is evidenced by the numerous official documents in which IC is mentioned, discussed, and planned. One core principle guides the vision advocated in these various policy documents: providing a people-centered approach for provision of care to people with health problems. One challenge posed by this approach is the coordination and sharing of patient data between professionals from different areas of practice, i.e. health, mental health, welfare and social sectors. Although most of the identified documents advocate a decompartmentalisation of sectors, the focus continues to be on individual sectors: primary care, social care, mental health, etc.

A. POLICY DOCUMENTS

12. **'Transversaal Actieplan Flander's Care' 2015-2019 (Flemish Government – 2014)**[73]

    This **Transversaal actieplan** documents the Flemish Government's focus 'to demonstrably improve the supply of high-quality care through innovation and stimulate responsible entrepreneurship in the care economy'.

    The action plan is described as dynamic because of the rapid evolution of technology in the field. The goal is to apply advances in science and technology to the care sector while creating economic added value for Flemish companies. The Flemish Government deems it essential to continue working on building a synergy between the business world, care practices and knowledge centres where the end users also have their input.

    Action lines are divided into two sections. The first section focuses on data sharing, mHealth, assistive technology & aids, and chronic care model. The second section focuses more on instruments and processes that can be deployed: new cooperation and organisation models, care for talent, internationalisation, and attention to ethical challenges. In each action line, the focus is on a transversal approach, to avoid the fragmentation of resources and duplication of initiatives. Many of the proposed actions fall within the Flemish government's regular policy. Actions are aimed at generating more impact, stimulating awareness and involvement of all stakeholders, and setting clear objectives (measurable KPI's) and time targets. Relevant ties to other initiatives at the Flemish, federal and European level are included.

13. **'Visie 2050' – Een langetermijnstrategie voor Vlaanderen (Flemish Government – 2016)**[74]

    This memorandum describes the desired long-term transition plan and outlook for Flanders towards 2050. The document defines various objectives for health, welfare, and family care that the Flanders government wants to meet by 2050. These objectives are subdivided into various criteria such as quality, accessibility, financing, well-being and quality of life, organisation of care (deinstitutionalisation and cooperation), prevention, empowerment, digitalisation, training of professionals, innovation, diversity...

    The future vision for Flanders is explored across several themes including "accessible and high-quality care". Subsequently, seven transition priorities were identified to realise sustainable long-term solutions and system innovations. "Work on care and well-being 4.0" is one of those priorities. Flanders' objective concerning the organisation of care and welfare makes a clear reference to IC.

14. **'Nieuw vlaams ziekenhuislandschap: Focus op de patiënt' (Flemish Agency for Care and Health – 2016)**[75]

    The Flanders hospital reform plan aims to work towards a new hospital landscape centered around patients' needs and wishes, and evolutions taking place in other sectors. This is the Flemish equivalent of the federal policy document on hospital funding reform (2015). It also contains similarities with the Joint Plan (2015) and the Transversal Flanders' care document (2014). With this policy document, Flanders promotes the impetus to initiate new dynamics towards strategic care that cater to the needs of the population and create added value for the patient and society. The future hospital landscape must optimise the relationship between the highest possible (perceived) quality of care and efficient cost control.

This hospital reform plan is part of the Flanders Government's vision of their healthcare system for the future. Just as the federal healthcare plan does, this one aims to create a series of care & cure networks between hospitals and grouped within regional care zones.

15. **'Vlaams Actieplan Geestelijke Gezondheid - Strategisch plan' (Flemish Government – 2016)[76]**

    The Flanders Mental Health Reform plan formulates a long-term vision on mental health care. The objective is to provide a global approach to strengthening the delivery of mental health care and provide high-quality, sustainable, flexible, and demand-driven services. The vision and model proposed are rooted in concepts of IC and integrated mental health care: continuity of care between care and cure sectors, empowerment, autonomy, self-determination, people-centered care, networking, strategies for promotion and prevention, multidisciplinary stakeholder participation, care digitalisation. The objectives stem from the WHO Mental Health Action Plan 2013-2020 and were supplemented with those included in mental health guides for children, young people, and adults.

    The **Decreet betreffende de organisatie en ondersteuning van het geestelijke gezondheidsaanbod** [77] was published as a result of the Mental Health reform. It both delineates the vision for a reformed and integrated mental health system, and as a decree, provides a legal basis for all actions implemented, and newly shifted competences following the Sixth State Reform.

16. **'Een geïntegreerde zorgverlening in de eerste lijn' - Conferentie eerstelijnszorg: Reorganisatie van de eerste lijn in Vlaanderen' (beleidsvisie) (Flemish Agency for Care and Health – 2017)[78]**

    In 2017, the Flanders regional authorities formulated this primary care transition plan, in coordination with the Flanders Agency for Care and Health. It aims to restructure its primary care sector towards a more integrated and people-centred healthcare system, based on the Quadruple Aim approach.

    This plan illustrates the outcomes of a phase that saw the implementation and testing of 60 new primary care zones. A central element of this plan is therefore to develop Primary Care Zones to improve coordination and intersectoral collaboration with a focus on vulnerable groups. These primary care zones started in 2019 and were supported by the Flemish Institute of Primary Care (Vivel-Vlaams Instituut Voor de Eerste Lijn).[79]

    The ambitious plan states the Flanders regional authorities' objectives: strengthen and simplify the organisation of primary care, establish the foundations for strong integrated care, create innovative collaborations between well-being initiatives, health and social care providers, with a focus on vulnerable groups.

    This plan is driven by a shift in mindset towards patient-centered care, autonomy, self-determination, integrating an all-encompassing care plan for the needs of chronically ill patients, digitalisation of care, engaging and supporting informal caregivers, providing health professionals with access to continuing education.

    The **Decreet betreffende de organisatie van de eerstelijnszorg, de regionale zorgplatformen en de ondersteuning van de eerstelijnszorgaanbieders** was published after the conference and provides the basis for reforming primary care.[80]

17. **'Vlaams Mantelzorgplan 2016-2020' (Flemish Minister for Welfare, Public health and Family – 2017)[81]**

    This plan was published by the Flemish Minister for Welfare, Public Health and Family. The overall aim of this plan is to recognise the social and economic role of informal caregivers in the provision of care to frail people, and to support them in their environment. It includes a list of aims based on a broad vision of informal care. The plan requires a level of customisation whereby each individual situation will necessitate its own solutions, starting with diversified and varied support services. The plan is divided into 5 chapters: an introduction, societal acknowledgement and appreciation of informal caregivers, support of informal caregivers (including 7 fields of action), collaboration between informal and formal caregivers (including 3 fields of action), young informal caregivers (including 5 fields of action).

18. **‘De Vlaming leeft gezonder in 2025: strategisch plan 2017-2025’ (Flemish Minister for Welfare, Public health and Family – 2017)**[82]

    This preventive plan based on the premiss that “in 2025 every citizen in Flanders lives healthier”, draws on the Flemish health objectives regarding nutrition, physical activity, tobacco, alcohol, and drugs.

    The plan formulates objectives, and proposes strategies to achieve them, as well as the budgetary framework for its implementation. The focus is to promote the Health-in-All policies, recognising the importance of factors beyond healthcare that promote good health such as family, leisure time, care and welfare, neighbourhood and local community. Several sub-objectives are delineated for each heading, and themes covered by the plan include healthy eating and nutrition, physical activity, risks of sedentary lifestyle, dangers of tobacco, alcohol, and drugs.

19. **‘Regeerakkoord 2019-2024’ (Flemish Government – 2019)**[83]

    This document is essentially an updated version of the Flanders government’s vision of healthcare reform, following the Sixth State Reform. It is structured around five major objectives under which several themes are developed. The objective "Flanders is social and just" includes a section on "Welfare". The theme of well-being is subdivided into 5 subsets: Welfare and Family, Integrated Qualitative Care and Support, Health, Flemish Social Protection and Flanders’ Care. Under the first heading, "Welfare and Family", objectives are centered around integrated partnerships such as region-wide social children’s homes (Huizen van het kind), ‘One Family One Plan’ (from the Flemish *één gezin – één plan)*, caring neighbourhoods, person-to-person financing, and the introduction of BelRai for people with disabilities. These are all integrated care topics, but clustered under different themes.

    The second heading labelled "Integrated Quality Care and Support" addresses the subject of decompartmentalisation of the care and welfare sectors.

    The last section groups objectives related to the Flanders' Care programme. In this section, budgets allocated to policies in the areas of Economy, Science and Innovation, and Welfare, Public Health and Family, are combined to drive and implement innovation in care according to the Flanders' Care Action Plan (2014). Priority is given to new collaboration models between care and industry sectors, building secure and accurate electronic data sharing, the application of big data technology and artificial intelligence, innovative treatments, new care organisation models, and the ethical challenges of care innovation.

20. **‘Beleidsnota 2019-2024 - Welzijn, Volksgezondheid, Gezin en Armoedebestrijding’ (Flemish Minister for Welfare, Public health and Family –2020)** [28]

    This important policy paper from 2020 is an outline of how the Flemish health minister plans to implement the Government agreement. The document is divided into 6 policy areas, which include 45 strategic objectives and 87 operational objectives. Within these strategic objectives, there are 5 overarching aims that recur across various policy fields. These are, investing in quality assurance and evaluating indicators, expanding accessibility to care and services that are close by and affordable, innovation and digitalisation, Health en Wellbeing in all policies’, and transversal poverty reduction policies.The idea behind these five overarching strategic aims is to promote a transversal approach to facilitate smoother coordinated care and services. Furthermore, in each policy field covered (Welfare, Health and Residential care, Growing up, People with Disabilities, Social Protection and Care Infrastructure) we come across elements that contribute to IC.

21. **Covid-19 en het actieplan mentaal welzijn (Flemish Minister for Welfare, Public health and Family –2020)**[84]

    This action plan aims to deal with the psychosocial consequences of the Coronavirus health crisis. It illustrates that the government takes the severe psychosocial impact of the pandemic, very seriously.

    The plan focuses on the general population but also underlines the needs of specific target groups such as caregivers and residents of care facilities, children/young people and families, people with social or psychological vulnerabilities, people affected by Covid-19, their loved ones and those who have lost loved ones to Covid-19.

22. **Vlaamse Veerkracht - Relanceplan Vlaamse Regering (Flemish Government – 2020)** [85]

    As Flanders was badly impacted by the pandemic, funds have been allocated (4.3 billion euros) to support and restore the economic and social sectors. Part of the budget allocated to this effect will be earmarked for hospital and welfare infrastructure.

    This stimulus plan (plan de relance) is the most ambitious investment plan ever launched by the Flemish Government. Although no direct mentions of IC or the organisation of care can be found in the document, it does include objectives concerning working conditions and labour organisation for health professionals, the expansion of the provision of care and defragmentation of health and social systems. Only digitalisation and mental health objectives are directly related to IC.

23. **'Vlaams actie plan armoedebestrijding 2020-2024' (Flemish Minister for Welfare, Public health and Family –2020)**[86]

    The action plan collects the actions of the various Flemish ministers on combating poverty for the legislature 2020-2024.This plan was developed with the participation of target groups in partnership with the Anti-Poverty Network, and was finalised during the pandemic crisis. It focuses on 3 driving themes with up to 5 priority policy measures. These objectives comprise a total of 65 action lines. This Plan does not specifically refer to IC, but if we look at the definition of poverty it uses, we realise that it is essential to empower this vulnerable group of the population if they are to benefit from IC as well. Actions related to the development of IC and its impact on this vulnerable group include accessibility to social support and services, further deploying Integrated Comprehensive Services (from the Flemish *GBO - Geïntegreerd Breed Onthaal*), increasing health literacy and resilience, prevention, promoting mental health, strengthening local cooperation between stakeholders and social homes for children (Huis van het kind), strengthening neighbourhood and community networks (caring neighbourhoods), increasing self-reliance by focusing, for example, on mending the digital divide.

24. **'Sterk sociaal werk. Actieplan 2020-2024' (Department of Welfare, Public Health and Family – 2020)**[25, 84]

    This plan results from the 2018 Social Work Conference. The general aim is to draw guidelines on how to address the many challenges related to the organisation of social care such as socialisation of care, dealing with hybridisation of care, super-diversity in society, digitalisation, citizens with unmet social or medical needs, etc.

    The starting point was the five major lines for future social work resulting from the Strong Social Work conference: proximity of services, politicisation, process-oriented work, generalist social work and building connections.

    The aim of this plan is to strengthen social work practices in alignment with the five lines for future social work, and fundamental human and social rights for all, more specifically, vulnerable groups.

25. **'Vlaams Dementieplan 2021-2025' (Flemish Minister for Welfare, Public health and Family –2021)**[87]

    This is an updated version of the Flanders government's 2016 Dementia Plan.

    This new Dementia Plan focuses on a competence-based approach: prevention, optimising the quality of care (both in the home environment and in residential care centers), supporting informal caregivers, destigmatising dementia, and promoting a nuanced perception of the disease. One of the objectives is to identify the conditions that will ensure that people with dementia get the support they need to live with dignity, that family caregivers also receive recognition and support and are not left alone. The plan is divided into 8 sections, each addressing a different aspect of the issue at hand: prevalence, prevention, quality of care, person-centred approach, support of informal caregivers, perception of someone with dementia, target group policy, monitoring. Actions are defined for each section.

B. LEGISLATIVE DOCUMENTS

26. Decreet betreffende de organisatie van het netwerk voor de gegevensdeling tussen de actoren in de zorg (Flemish Government – 2014)[88]

The decree establishes the framework for ICT cooperation between healthcare providers. To adequately and efficiently face the challenges involved in reorganising its healthcare and social care system, Flanders needs to deploy new information and communication technologies as part of a data sharing network. This is a key element to support the provision of care. The network aims to facilitate cooperation through efficient and safe sharing of personal patient data between all care stakeholders (including Government). The idea is to enable the provision of seamless, continuous, and quality care. It also considers data protection in terms of regulations enforced by the Flemish social protection agency. This in turn minimises the administrative burden for both care users and care providers. Flemish Agency for the Collaboration on Data Sharing between Actors in Care (VASGAZ) was established to manage this network.

27. Decreet houdende de Vlaamse sociale bescherming (VSB) (Flemish Government – 2018)[89]

This decree (VSB) regulates the organisation of Flemish social protection and lays the foundation for its expansion. After the Sixth State Reform, policy competences, in the field of long-term care, were redistributed between the federal and federated entities. Flanders took over support and rehabilitation competences. Via the VSB, the Flemish government wants to regulate its financing. In the first phase, care budgets, budgets allocated to residential care for the elderly and mobility supports were included. By 2022, rehabilitation facilities and multidisciplinary consultation will also come under the VSB.

The Flemish social protection system provides a care budget (a monthly allowance) for people who require extensive long-term care. This includes people with serious health problems and people with disabilities. As of 2019, it also includes the financing of care for the elderly, recognised by Flanders as a vulnerable group. In a later phase, the various components will be financed differently based on a person's care profile (BelRAI), by issuing care tickets.

The decree is divided into five parts. Part 2 focuses on care-related funding, including the care budget, the care ticket and reimbursement for mobility aids. Part 3 regulates the organisation-related financing and Part 4 bundles several temporary provisions, for instance those pertaining to residential care centres.

28. Decreet betreffende het lokaal sociaal beleid (Flemish Government – 2018)90

This decree aims to support local administrations and provide them with instruments to conduct a local social policy. It also aims to confirm the importance of a strong social policy at local level and ensure that local administrations take the lead in this.

29. Decreet betreffende de organisatie en ondersteuning van het geestelijke gezondheidsaanbod (Flemish Government – 2019)[77]

This 2019 decree addresses the regulation of the mental health sector. It still lacks policy on implementing such regulation and is not yet in force. It nevertheless formulates some elements of the Flanders government’s vision about the future organisation of mental health care.

The objectives of the decree target destigmatisation as well as implementing high-quality, integrated mental healthcare. The terms ‘continuous care’, ‘people-centered care’ and ‘integral care and support’ are often used in this document.

The six working principles described in the plan are aimed at the broad spectrum of mental health care. Some principles, based on the definitions used, are also related to IC.

The decree aims to regulate the organisation and content of mental health care provision. People-centered care is broken down into five care levels. The care offer is divided into functions/roles and programmes. They include prevention, early detection, empowerment, sharing of expertise, as well as cooperation within the sector, collaboration with partners from other sectors of the Welfare, Public Health and Family policy area, as well as those not part of the mental health network.

In addition, there is a discussion on strategic care planning, which would allow mental health care provision within a mental health network to meet the overall care needs of the target population.

Finally, while data sharing is not explicitly broken down in terms of data exchange between care providers, it is more about the role it should play in guaranteeing quality care and support, and providing the Flemish government with tangible data that can help guide policy adjustments, justify additional funding, and monitor quality.

30. **Besluit van de Vlaamse Regering van 26 april 2019 betreffende zorgstrategische planning (Flemish Government – 2019)** [79]

    In September 2019, the Flemish regional government published a decree setting out the conditions for government approval of local collaborative initiatives between networked hospitals. The decree specifies the form and content of strategic care plans, thematic care plans and individual care plans that must be completed and submitted to the Flanders Agency for Care and Health. This, in effect, presents the tools that will enable the region's hospitals to organise themselves into networks and meet new funding requirements introduced by the federal Joint Plan.

31. **Woonzorgdecreet van 15 februari 2019 (Flemish Government – 2019)**[91, 92]

    This decree is an update of the residential care decree of 2009. It defines the objectives, operating principles and tasks of residential care facilities and associations, for carers and users. The purpose of this decree is to protect the residents' quality of life. The decree is interwoven with the Flemish Social Protection Decree and the Primary Care Decree. It includes specific references to the decree on local social policy (cf. art. 4 – caring neighbourhoods), as well as several common objectives across various residential facilities, for example, the organisation of integrated care and support.

2.3.1.3 Wallonia

The concept of integrated care is rarely used in the Walloon policy documents we examined. However, Wallonia is undertaking a major restructuring of its own health care system. Following the Sixth State Reform, many competences in the field of health were transferred from the federal level to the regions and communities. In parallel with this state reform, agreements among the French-speaking federated entities have also led to certain health competences being redirected from the French Community to the Walloon Region and the Brussels federated entities (Sainte-Emilie Agreement - Accord de la Sainte-Emilie, septembre 2013 et Loi spéciale du 8/08/1980 de réformes institutionnelles, modifiée par la loi spéciale du 6/01/2014).

In 2015-2016, a new public interest organisation was created in Wallonia to integrate these new competences: l'Agence wallonne de la Santé, de la Protection sociale, du Handicap et des Familles, (its name by decree), usually referred to as l'Agence pour une Vie de Qualité (AViQ). The AViQ manages many former federal, regional or community matters, including prevention and health promotion, the organisation of primary care, policy on mental health and the elderly (including nursing homes) and the provision of care in and outside of health care institutions (Décret relatif à l'Agence wallonne de la santé, de la protection sociale, du handicap et des familles - Gouvernement wallon, 3 décembre 2015).

In 2015, Wallonia set up a health telematics platform and in 2016 designated the "Réseau santé wallon" (RSW) to manage it (Décret relatif à la reconnaissance d'une plateforme d'échange électronique des données de santé - Gouvernement wallon, 16 octobre 2016).

The Covid-19 health crisis has slowed down certain initiatives and prompted the Walloon government to launch the Get Up Wallonia! program (Get up Wallonia!, Avril 2021) to map out the future of Wallonia. Within this framework, a citizen-wide consultation was organized in November 2020, followed by Task Forces initiatives composed of field experts (including the health promotion and prevention sector, the first line of care sector, the ambulatory and home care sector, and the hospital and residential sector), as well as institutional stakeholders and social partners, resulting in a final document published in April 2020. This is one of the three founding documents of the Plan de relance de la Wallonie (2021), and to date, the most successful piece of Walloon policy in terms of integration. It should also serve as a support to the "Assises de la première ligne wallonne", participative process to rethink the organisation of tomorrow's health and care services in Wallonia launched on 30 September 2021, by Walloon Health Minister Christie Morreale.[93]

A. POLICY DOCUMENTS

32. ‘Plan wallon de prévention et de promotion de la santé’ (Walloon Government – 2017) [94]

Since the Sixth State Reform and the agreements reached between the French-speaking federated entities, health prevention and promotion have transferred over as regional competences. In 2017, Wallonia adopted its first plan for health prevention and promotion including a reference framework for its implementation. It consists of five major lines which correspond to the five thematic objectives defined in the first part of the plan. This is intended to guide stakeholders’ field interventions and is expected to evolve over time and promote stakeholder engagement and participation. The final plan including the refence framework was submitted to the government in December 2017. This long-term plan will be implemented through to 2030.

A **draft decree** amending the Walloon Code of Social Action and Health with regard to prevention and health promotion was adopted by the Walloon Parliament on 30 April 2019. This decree gives legal basis to the plan. It presents, among other things, the plan’s steering committee, mechanisms for evaluating and adapting the plan, roles and competences of the various operators and field stakeholders, as well as financing methods.

The first part of this plan includes the priority aims for Wallonia. It was presented in January 2017 to the Walloon government and identifies eleven transversal aims applicable to all health priorities, among which eight are linked to IC.

33. Déclaration de politique Wallonie 2019-2024 (Walloon Government – 2019) [95]

In its policy declaration of 2019, the Walloon government takes over new health-related competences (organisation of the first line of care, prevention and health promotion, fight against addiction, mental health institutions, hospital infrastructures, and certain rehabilitation agreements). It underlines the need to reorganise the first line of care by giving primary care and general practitioners a central role in a patient's care pathway, as well as the need to restructure the hospital landscape by fostering hospital collaboration.

The emphasis is on restructuring the Walloon health system, and care networks. It focuses on (1) the territorial organisation of the provision of care and cure based on first line of care zones spread throughout the Walloon territory, (2) building coherent lines of care between the primary care sector and specialised services, (3) redefining roles and the tasks shared between and among first- and second-line care stakeholders. The policy also introduces the need to structurally integrate health promotion and prevention in the reorganisation of care zones and redefine roles and task-sharing.

34. Get Up Wallonia! (Walloon Government – 2021)[96]

This recovery plan gives insight regarding the creation of local-regional territories. It sheds light on the complexity and diversity of the current local-regional territories and underlines the difficulty of building the future healthcare landscape on the territories where hospital networks straddle both sides of the Wallonia-Brussels borders. The program also identifies some of the responsibilities held by local-regional networks: (1) identify community needs, (2) include self- and hetero-evaluation mechanisms within the scope of continued learning and innovation, (3) integrate all care and cure stakeholders, (4) develop the concept of ‘advisor’ or ‘specialised point of contact’ in collaboration with the various field stakeholders. These responsibilities are intimately linked with the need for a strong local-regional governance structure. The governance structure of the various local-regional networks should be able to meet at the regional level to develop a culture of interprofessional and care-user learning and experience sharing.

35. ‘Plan de relance de la Wallonie’ (Walloon Government – 2021)[97]

This recovery plan is the fusion of three previous complementary recovery plans (including the Get Up Wallonia! operation plan).

It comprises five main themes, the fourth of which gathers measures relating to welfare, solidarity, and social inclusion. The themes are broken down into strategic objectives. The third theme, titled "protéger la santé" (protect health), is composed of 4 portfolio projects, the first three of which are related to the integration of care, i.e., the creation of local-regional primary health care networks, including mental health; integration of preventive health policies and investments in public health infrastructure; using digital technology as a lever to improve the quality of care.

These three project portfolios were articulated based on recommendations put forward in the **Get up Wallonia!** plan (2021). They focus on the need to develop monitoring tools alongside the creation of local-regional networks.

36. **'Feuille de route du Domaine d'Innovations Stratégique (DIS) : « innovations pour une santé renforcée » (Walloon Government – 2021)**[98]

This document, published by the Walloon Government, identifies "innovative technological, organisational and social activities, necessary for the transformation of the healthcare system in its broadest definition, as it relates to its preventive, diagnostic and curative missions" (p. 2).

It is included in the "Vision for 2050" plan, in which the Walloon government defines its objective to reorganise the Walloon region healthcare system based on the Triple Aim approach. In terms of objectives, the document presents three major ambitions: 1) to become an international leader in innovative therapeutic and preventive products, 2) to become an international leader in new medical technologies, 3) to be recognised for its excellence in e-Health models.

B. LEGISLATIVE DOCUMENTS

37. **Décret insérant certaines dispositions dans le Code wallon de l'Action sociale et de la Santé, relatives à la reconnaissance d'une plate-forme d'échange électronique des données de santé (Walloon Government – 2015)**[99]

This decree ratifies the creation of a platform that will support and promote communication between the various health stakeholders, through three missions: 1) manage electronic health data sharing, 2) support the Walloon government by providing data which will guide future decisions in the field of e-Health, 3) provide health professionals and care users with a safe and secure database. To carry out its tasks, the platform is responsible for supporting and coordinating e-Health initiatives, supervising e-Health projects, providing training for health professionals, and ensuring the interconnection of electronic patient records with the health systems of other federated entities.

38. **Décret insérant des dispositions relatives aux soins palliatifs dans le Code wallon de l'Action sociale et de la Santé (Walloon Government – 2019)** [100]

Following the Sixth State Reform, Wallonia took over certain competences such as the organisation of palliative home care. This decree establishes the role and missions of the three types of providers active in the area: palliative care platforms, the palliative care federation, and multidisciplinary palliative support teams.

The palliative care platforms cover a geographical area with a population of two hundred thousand to one million residents. It is responsible for implementing activities, self-evaluation and making adjustments accordingly. They are responsible for (1) informing the public and professionals, (2) raising awareness among professionals about the palliative approach to care, (3) proposing training for providers and volunteers in palliative care, (4) providing psychological support on demand, (5) consulting with the palliative care networks, (6) collecting statistical data and (7) collaborating by encouraging and authorising staff participation in inter-platform dialogue.

Each platform has at least one multidisciplinary support team that is either integrated into the platform or linked to the platform through a collaborative agreement. This team is specialised in palliative care and intervenes in patients' homes as a second line of care. Their missions are to (1) coordinate with and advise providers on all aspects of palliative care, (2) achieve efficient organisation and coordination of palliative care in the patient's residence setting, (3) provide psychological and moral support to care providers, patients and their families, (4) have extensive expertise in all aspects of palliative care, and (5) provide advice on palliative care to primary care providers who remain responsible for the patient's overall care.

A platform can partner with a federation whose missions are to: (1) ensure consultation and cooperation between platforms in order to promote and support the harmonisation of practices and the quality of activities, (2) coordinate actions, objectives and evaluations carried out by the platforms, (3) represent the members of decision-making bodies,

(4) inform its members of the sector’s progress, (5) bring stakeholders together to foster and develop exchanges and ideas, and (6) establish links with other federations.

2.3.1.4 Brussels region

Reflections on the integration of care in Brussels are closely tied to the Sixth State Reform. The transfer of competences is proving to be complex for Brussels-Capital, a bilingual region occupied by two communities: the French community and the Flemish community.

In Brussels, community competences are historically exercised by three community commissions: the French community commission (COCOF), the Flemish community commission (VGC) and the common community commission (COCOM/GGC). During the Sixth State Reform, the competences of the French-speaking community were transferred to the Walloon region and to the COCOF via the Sainte-Emilie agreements. Furthermore, the Sainte-Emilie agreements and special financing law provide for the transfer of COCOF institutions to the COCOM to guarantee institutional coherence in social and health policies, which until now had been split between all three community commissions. To organise the management of these new competences, a public interest organisation called *Iriscare* was created in Brussels, in 2017. However, some competences are managed exclusively by the COCOM administration (such as hospital policy, mental health care outside hospitals, organisation of primary health care and support to primary care professionals, health education and preventive medicine initiatives, and all policies related to infrastructure).

Thus, the policy declaration of 2019 clearly indicates the desire to take advantage of the transfer of competences to develop a global health policy that includes health prevention and promotion, primary care, hospitals, and rehabilitation structures.

To this end, the COCOM adopted the **Plan Santé Bruxellois** (2015) that aims to provide greater efficiency in meeting the healthcare needs of the Brussels population. The plan makes provisions, among other things, for the creation of a regional support structure for the first line of care (Brusano). The COCOF is drawing up the first Brussels health promotion plan, the main challenge of which is to ensure consistency between primary prevention, preventive medicine programmes, and actions and projects based on emancipatory approaches to health promotion. This **Plan stratégique de promotion de la santé** (2018) will be rolled out over a period of 5 years from 2018 to 2022.

Finally, in accordance with the decree of 3 May 2019, a **five-year plan to combat poverty** was drawn up by the Ministry of the French Community, public interest bodies dependent on the French Community and the Council for Combating Poverty and Reducing Social Inequality. This plan covers the period from 2020 to 2025.

These three plans initiate a social shift aimed at reducing social inequalities, and an organisational shift aimed at "a better organisation of care and social action and, guaranteeing the accessibility, quality and sustainability of care".

The joint general policy statement of the Government of the Brussels-Capital Region and the COCOM college for the 2019-2024 legislature, hope to see this shift accelerate by developing a **Plan Social-Santé Intégré**, reflecting a territorial approach to social action and health, and giving the Public Centres for Social Welfare (PCSWs) a key role in the deployment of policies to combat inequalities and poverty. This plan is currently being drafted based on recommendations from the Brussels Health and Social Estates General, which focused on the first Brussels social-health line. These Estates General took place in 2020-2021 and are part of a co-construction process between public and non-profit stakeholders, care users and researchers. They include strategic committees, eight thematic working groups (access to rights, sustainable food, neighbourhood approach, access to care and socio-health services, drug (mis)use and addictive behaviour, the elderly, health and environmental inequalities, mental health) and a citizen’s panel.

This plan should provide a framework for future local social and health contracts, which should in turn serve as a basis for policies on integrated and territorialised social services and health care, at neighbourhood level. These contracts, coordinated by PCSWs, will focus on health promotion, prevention, care policies and medical social support, housing, and nutritional health. Nine pilot districts have started the first phase of needs analysis and diagnosis. This phase will be followed by an implementation phase and an evaluation phase.

A. POLICY DOCUMENTS

39. ‘Plan stratégique de promotion de la santé 2018/2022’ (COCOF – 2017) [101]

Deriving from the decree dated 18 February 2016, allocating new competences to federated regions, this plan defines 3 primary objectives, 3 transversal objectives, and 3 thematic objectives and their priorities. These last 3 thematic aims are intended to support the 3 primary aims.

The aim of this Brussels health promotion plan is to ensure that, during the standstill period, the actions of the "COCOF/health promotion" remain consistent in terms of prevention and health promotion objectives, initiated by the Decree of 18 February 2016. One of its ambitions is to provide the COCOF with a plan, but also a tool for monitoring the implementation and outcomes, including objectives, means (budget) and evaluation indicators.

The main and transversal aims, strategies and means formulated in this plan are closely linked to the different aspects of health promotion, and only some of them are relevant in terms of the SCIROCCO dimensions of IC.

In March 2021, the Brussels Government published an “operational annex” to this plan.

40. ‘Déclaration de politique Générale commune 2019-2024’ (Brussels-Capital Region Government – COCOM/GGC – 2019) [27]

This general policy statement is a joint statement from the Brussels-Capital Region Government and the College of the Joint Community Commission, and it covers all its areas of competence (housing, mobility, education, environment, etc.). Health takes up a good ten pages of the statement. Its originality lies in the fact that it formulates a set of priorities and objectives which are articulated around a global vision for the reorganisation of health care and social services, including poverty alleviation - the **Brussels Social-Health Plan**.

The social-health plan is structured around 5 thematic lines, under which are listed various intentions (which are therefore not yet objectives in the strict sense of the word) of the Government of the Brussels Region as they relate to IC for the 2019-2024 legislative period.

The document contains the Brussels Region’s programme, which was formalised later the same year by the publication of a Health Plan.

41. ‘Plan Santé Bruxellois’ (COCOM/GGC and Ministers Didier Gosuin and Guy Vanhengel – 2019)[102]

This plan was drawn up by "the members of the combined college responsible for health policy, Ministers Gosuin and Vanhengel, and validated by the advisory council of the combined college services, the Iriscare management board and the economic and social council”. It covers the legislative period 2019-2025. It is therefore both programmatic and forward-looking, taking stock of the actions already carried out and those that remain to be implemented.

The document is organised around 7 principles, operationalised into 3 axes, 17 objectives and 44 measures. One of these principles is “to favour an integrated/defragmented approach” to care and social domains.

In more concrete terms, the document contains **6 main objectives** setting out the vision of the Brussels policy authorities with regard to the implementation of IC in the region. Each of these aims is accompanied by operational objectives presented in detail and include the vision on which the measure is based, the actions to be taken, an action plan and the bodies responsible for their implementation or evaluation.

The population group concerned by this plan is mainly comprised of people with chronic and complex pathologies, the elderly and palliative care patients.

42. ‘Plan stratégique Brusano 2021-2026’ (BRUSANO – 2021)[103]

BRUSANO is the primary care support structure created by the decree of 2019 on primary care from the COCOM/GGC (see further). It fulfils both a supporting function for frontline professionals in the Brussels-Capital Region, and is also the platform for palliative care.

It is first and foremost a strategic plan, in which IC is given considerable importance. BRUSANO formulates a series of strategic objectives (covering a period of 5 years) and operational objectives (covering a period of 2 to 3 years), most of which are aligned with its missions, specifically ‘helping frontline professionals implement integrated care’.

B. LEGISLATIVE DOCUMENTS

43. Décret relatif à la promotion de la santé (COCOF – 2016)[104]

In February 2016, the French-speaking government of the Brussels Region published a decree which aims to define the health promotion sector and lay down its legal and organisational foundations. This decree specifies that the entire sector will be reorganised throughout the duration of the legislative period (2018-2022) according to the health promotion plan. The plan must specify: 1) priority themes, objectives, strategies, and target audiences and living environments, 2) the social and environmental health factors on which action should be taken to reduce social inequalities in health, 3) links to other existing Brussels healthcare plans as well as the consultation and collaboration with stakeholders and public entities, 4) evaluation and monitoring methods enabling the degree to which objectives were met.

The decree also specifies that priority strategies must include intersectorality, networking, public participation, community mobilisation, shared analysis of the territory, training of professional and non-professional relays, local and community work, and the implementation of cross-cutting public policies. In other words, these are all strategies that correspond to the dimensions of IC.

44. Ordonnance relative à la première ligne de soins (COCOM/GGC – 2019)[105]

This document essentially lays out the legal foundation for defining the modalities of delivery of integrated primary care in the Brussels-Capital Region. It thus complements the ordinance of 7 November 2002 on personal assistance centres and services. The first line is clearly defined as bringing together all the stakeholders who can offer primary IC. It also defines its general missions.

45. Arrêté relatif à la structure d’appui à la première ligne de soins dans la région bilingue de Bruxelles-Capitale (COCOM/GGC – 2019)[106]

This decree ratifies the creation, by the COCOM, of an institution whose specific mission is to support primary care providers in the Brussels-Capital Region.

The missions of this structure are also specified as the means by which it should fulfil its tasks.

2.3.1.5 German-speaking Community

Box 2 – Policy on integrated care in the German-speaking Community (Ostbelgien)

Health care in the German-speaking Community, also called ‘Ostbelgien’ is characterised by

- A low density and aging population
- A low size territory (9 municipalities in the east of Belgium with around 78 000 inhabitants)
- A hospital sector including 2 hospitals with low occupation rates
- A primary care sector with a workforce shortage in GP and nurses
- The language impedes integrating care with the other Belgian Communities, therefore collaboration is sought with German and Luxembourgish facilities across the border

These findings are based on the analysis of the health care requested in 2008 by the German-speaking Government.[107] This analysis[107] as well as 4 other reports[108-111] published from 2009 to 2020 on the future orientation of health and social care in the German Community feed into the regional development plan, called "Regional Development Concept (RDC)".

Although the word 'integrated care' was not explicitly mentioned in these documents, several actions are ongoing or planned:

- Increase synergies between the 2 hospitals and their collaboration with GP by creating a global health network supported by a shared medical record[108-111]
- Create interconnections and synergies for effective and concerted health promotion and medical prevention[108, 109]
- Enabling independent ageing by creating a social and care network around the elderly [108]
- Support activities to build a cadastre of primary care provider in German-speaking Community and increase the attractivity of primary care professionals[111]
- Support the creation of community health centres (Ärztehäusern, wijkgezondheidscentra, maisons médicales) or healthcare centres with a similar structure to bring together several GP and specialist practices as well as other providers such as those dealing with preventive medicine (such as Child and Family Services, school health services, Psycho-medical and social centres (PMS)…)[108, 109]
- Support activities for nurses to allow a seamless transition from hospital care to home care and to support nurses with mobility issues[108]

From 2012 to 2024[109-111], the government of the German-speaking Community has been developing several projects to reach these goals and overcome the obstacles previously mentioned. To support the transition from a healthcare system centered on hospitals to a healthcare system oriented to primary care, German-speaking Community authorities had launched a study on integrated care including stakeholder consultation and analysis of care consumption in Ostbelgien. Results are expected in 2022. Therefore, the maturity on integrated care as perceived by stakeholders and the related aims for the German-speaking Community are not analysed in dept in the context of this report.

2.3.2 Aims according to the dimensions of the SCIROCCO self-assessment tool

In total, we identified over 180 different objectives in the 45 selected documents from the various federal and federated authorities. To provide an overview of these different objectives as they appear in the documents reviewed, we needed to group them under more concise categories. As a result, they are presented in the left-hand column of each table, grouped under the heading of each dimension of integrated care from the SCIROCCO tool.

Quotes were used to illustrate some of these identified aims, especially when congruence between federal and federated entities was found.

In the right-hand column, we indicate the different documents in which each identified objective appears, by level of authority. These documents are referenced by the numbers in brackets, from 1 to 45, as listed in the previous section. Note that there are no policy documents from the German community as these were only added in a later stage (see section 2.2).

2.3.2.1 Readiness to change

When reading the different policy documents, we extracted the following aims related to the *readiness to change* dimension. They are not always formulated in the different documents in terms of ‘aims’ but rather as means to support change.

Table 2 – Aims related to readiness to change

Aims	Policy document*			
	Federal	Flanders	Wallonia	Brussels
Change the current healthcare paradigm	(2, 3, 7)	(13,16, 19, 20)	(33)	(41)
L'état de santé des citoyens est influencé non seulement par les soins de santé, mais aussi par d'autres facteurs (mode de vie, enseignement, …) qui, si l'on agit correctement à ce niveau, peuvent contribuer à éviter bien des problèmes de santé. Tout cela implique que l'axe des soins doit être déplacé du patient avec ses maladies (les soins de santé curatifs) vers la santé (curative et préventive) de tous les citoyens (et pas uniquement les patients) considérée sous l'angle de la population (3). ***Om een antwoord te kunnen bieden op deze uitdagingen is er nood aan een paradigmashift in het beleid rond de organisatie van de zorg van aanbodgestuurde naar vraaggestuurde zorg (16)*** ***Het aanbod is niet meer het uitgangspunt, wel de Vlaming met een concrete zorg- en ondersteuningsvraag. De levenskwaliteit van de Vlaming staat hierbij centraal, met de samenwerking tussen zorg- en welzijnsactoren als een kritische succesfactor. De beschikbaarheid, de betaalbaarheid en de kwaliteit van de zorg en ondersteuning vormen onze cruciale doelstelling samen met een efficiënte inzet van mensen en middelen (19)*** ***Pour permettre à tous de vivre en bonne santé, il faut d'abord agir sur les multiples déterminants de notre santé : l'alimentation, l'exercice physique, l'emploi, le logement, l'environnement, le soutien à la parentalité et à la prévention, etc. (33)*** ***L'explosion des besoins de prise en charge de longue durée principalement pour les maladies chroniques pose un défi nouveau à nos systèmes de santé. Il existe aujourd'hui un fort consensus sur la nécessité de prendre en charge différemment les patients, par une approche intégrée des soins où les acteurs collaborent de manière décloisonnée au profit de leurs patients (41).***				
Adapt the legislative framework	(2,7)	(28, 16)		(40)
Co-construct change in the health system	(2)	(30)	(34)	
Le concept de co-création ou développement conjoint joue un rôle important dans ce processus : un changement ne peut s'opérer que lorsque tous les acteurs se sentent impliqués dès le départ et poursuivent le même but. Créer une assise pour le changement est une première étape importante (2).				
Recognise change as an iterative process	(2)			
Il importe d'avoir à l'esprit que la réalisation de changements de ce genre (processus d'intégration des soins) est non linéaire et généralement très chronophage, capricieuse et imprévisible. Il n'existe donc pas de "recette standard" ni de plan par étapes invariable. Il s'agit d'un processus itératif au cours duquel les objectifs, les stratégies, les acteurs, les moyens engagés, les activités etc. doivent être réexaminés, affinés, ajustés, évalués et/ou améliorés en permanence en fonction des priorités, des besoins ou du contexte spécifiques à ce moment-là (2).				
Use innovation to drive change	(2)	(12)		(42)

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.2 Structure and Governance

The governance of integrated care is organised on two levels in Belgium: (1) the macro level, i.e. policy framework, and (2) the meso level, generally structured on a geographical basis, including management and support. The policy documents identify distinct objectives/missions for each level of governance.

Table 3 – Aims related to structure and governance

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Develop governance structures to support changes into healthcare system	(2)	(16, 29, 30)	(32, 34, 38)	
Développer une structure de gouvernance qui soutient le processus de changement (2)				
Develop collaborative synergies between federal and federated structures	(2, 7)	(15, 16, 19, 20)		(39, 40, 41)
Ensure all policies include healthcare	(2, 3, 7)	(13, 19, 20)	(32)	(41)
Inclure la santé dans toutes les politiques en développant des synergies avec les politiques de formation, d'aide aux personnes, d'aide sociale, d'emploi, d'intégration sociale, etc. (2) *In het kader van het "Health in all"-principe zullen de federale gezondheidsadministraties loyaal en proactief bijdragen aan de hervorming en het beleid van andere sectoren, met name inzake milieu, werk en sociale zekerheid. (general policy note Vandenbroucke) (7)* *L'état de santé des citoyens est influencé non seulement par les soins de santé, mais aussi par d'autres facteurs (mode de vie, enseignement, …) qui, si l'on agit correctement à ce niveau, peuvent contribuer à éviter bien des problèmes de santé. Tout cela implique que l'axe des soins doit être déplacé du patient avec ses maladies (les soins de santé curatifs) vers la santé (curative et préventive) de tous les citoyens (et pas uniquement les patients) considérée sous l'angle de la population (3).* *In 2050 is Vlaanderen wereldwijd gekend voor zijn hoogwaardige, innovatieve en geïntegreerde welzijns- en gezondheidszorg, volgens het principe van health in all policies (13).* *Le concept HiIAP prôné par l'OMS consiste à réfléchir aux implications de toute politique, quelle que soit sa nature, sur la santé. Le Plan s'intéresse principalement aux domaines pour lesquels la Wallonie dispose de leviers d'action. Cependant, la promotion de la santé ne peut se déployer pleinement sans le concours des autres secteurs, notamment les suivants : action sociale, environnement, logement, justice, enseignement, emploi, mobilité, aménagement du territoire et développement durable. La responsabilité de la Wallonie est par conséquent d'être proactive pour décloisonner les secteurs, quel que soit le niveau de pouvoir compétent, et pour prendre le leadership en matière de promotion de la santé. (32)* *L'explosion des besoins de prise en charge de longue durée principalement pour les maladies chroniques pose un défi nouveau à nos systèmes de santé. Il existe aujourd'hui un fort consensus sur la nécessité de prendre en charge différemment les patients, par une approche intégrée des soins où les acteurs collaborent de manière décloisonnée au profit de leurs patients (41).*				
Define territories (local-regional areas) and networks (hospitals) in which provision of care is structured	(2,3, 4, 5, 7)	(14, 16, 20, 29)	(33, 34, 35)	(41, 42)

Aims	Policy document			
Le gouvernement fédéral prévoit dans son accord de gouvernement qu'il créera en concertation avec les entités fédérées le cadre réglementaire adéquat pour développer ces nouvelles formes de soins. Toutes les entraves réglementaires à la collaboration axée sur les patients pour les dispensateurs de soins dans des réseaux horizontaux ou verticaux seront inventoriés et classés (2). *Définir son territoire, sa population cible et son éventuelle évolution au cours du temps, constituer un réseau de partenaires qui souhaitent développer des projets ensemble (4)* *Op basis van de resultaten van de pilootprojecten creëren we bepalingen voor de erkenning en subsidiëring van de regionale zorgplatformen (20)* *De modifier en profondeur le système wallon en responsabilisant les acteurs et en finançant les structures via les réseaux de soins locorégionaux sur base du territoire couvert (34)* *La Commission communautaire commune souhaite imprimer deux axes de transformation. Le premier axe de transformation porte sur l'adéquation de l'offre des hôpitaux en regard des besoins des populations et s'inscrira dans la logique des réseaux, initiée par la Ministre fédérale de la Santé publique. (41)*				
Develop collaboration between hospitals based on a network model	(3,5)	(14, 16)	(33)	(41)
Entre hôpitaux, on distingue les réseaux suivants : • *Pour les soins cliniques (via l'envoi de patients ou des prestataires de soins qui se déplacent) ◊ afin de pouvoir toujours garantir aux patients, d'une manière socialement efficiente, l'accès à la meilleure expertise disponible* • *Pour les services médicaux de soutien (laboratoire, anatomopathologie, pharmacie, stérilisation centrale – dans le cadre desquels les échantillons ou le matériel se déplacent) -> afin de pouvoir toujours utiliser ces équipements et infrastructures onéreux de la manière la plus efficiente possible, et d'éviter la surcapacité (par ex. salles blanches)* • *Pour les services de soutien (dossier électronique du patient, groupement d'achat, tarification-facturation, environnement et prévention, …) -> essentiellement en vue de partager l'expertise et de réaliser des économies d'échelle (3)* *De samenwerkingsverbanden hebben niet als doelstelling om nieuwe grote fusieziekenhuizen te realiseren, maar vertrekken van een visie die de identiteit van de verschillende deelnemende partners versterkt. Hiertoe dient een regionale zorgstrategische planning de taakdifferentiatie van de verschillende zorgpartners in onderlinge complementariteit vast te leggen. Deze onderlinge taakafspraken vertrekken vanuit een patiëntgericht model gebaseerd op maat van de noden van de doelgroepen en de specifieke mogelijkheden van de partners om een kwalitatief zorgaanbod te garanderen. De samenwerkingsverbanden stimuleren de samenwerking tussen professionals met meer mobiliteit van expertise in ziekenhuis overstijgende associaties. De samenwerking centraliseert een aantal functies waarbij meerwaarde kan gecreëerd worden door concentratie van expertise of technologie. Tegelijkertijd valoriseert het samenwerkingsverband de basisspecialistische zorg proximaal bij de lokale zorgvrager en articuleert met de geëigende structuren van de partners van de eerstelijn (14).* *Dès lors, le Gouvernement entend : - Dans le cadre de la constitution des réseaux loco-régionaux hospitaliers, proposer rapidement l'adoption des mesures décrétales nécessaires afin de définir un cadre juridique pour la participation des personnes morales de droit public à une collaboration entre hôpitaux de droit public et privés associatifs. […] ; - Favoriser la coopération entre les hôpitaux tenant compte de l'accessibilité géographique et de la continuité des soins dans le respect des choix éthiques du patient ; […] (33)* *Maatregel 1: de ziekenhuisnetwerken uitbouwen voor een betere afstemming van het aanbod Visie:[…] De oprichting van netwerken moet, aanvullend op de toekomstige programmatie van activiteiten, toelaten een compleet basisaanbod te garanderen in elk netwerk en bepaalde meer gespecialiseerde activiteiten – die op het vlak van deskundigheid, human resources en financieel zwaarder wegen – te concentreren. Het netwerk verzekert dat de basisdienst toegankelijk is voor de bevolking, zonder dubbel werk te verrichten dat tot efficiëntieverlies leidt. De ziekenhuizen zullen een echt reorganisatiebeleid voor hun activiteiten moeten voeren om een drieledige doelstelling te behalen: nabijheid, kwaliteit en efficiëntie. (41)*				

<table>
<tr><th>Aims</th><th colspan="4">Policy document</th></tr>
<tr><td>Analyse situations, identify and plan actions, manage pilot projects and coordinate actions, assess actions, and ensure quality improvement and change management</td><td>(4)</td><td></td><td></td><td></td></tr>
<tr><td>Stimulate collaboration between local/community care and support services and institutions, and strengthen local networks of stakeholders across care lines</td><td>(2, 3, 7)</td><td>(16, 19, 20, 30)</td><td></td><td></td></tr>
<tr><td>Reinforce the role of primary care</td><td>(1, 2, 7)</td><td>(16, 20)</td><td>(32, 33)</td><td>(41, 42,44, 45)</td></tr>
<tr><td colspan="5"><i>la norme de croissance ne sera plus répartie dès le départ et affectée aux différents objectifs partiels, mais qu’après concertation médico-sociale, des choix spécifiques seront faits à cet égard (par exemple, l’extension du paquet assuré, l’amélioration de l’accessibilité, le renforcement de la première ligne, l’amélioration de la qualité), l’introduction de l’innovation au service du patient, ou encore permettre la gestion du changement et la promotion des soins intégrés (7)</i>
<i>Het is essentieel dat professionele (zorg- en ondersteunings-)systemen pas in actie komen wanneer ze nodig zijn en enkel daar waar ze nodig zijn. In een zorgende samenleving is professionele zorg niet voor alles de oplossing, maar treedt ze eerder ondersteunend en aanvullend op ten aanzien van het sociaal netwerk en de eigen kracht van mensen. Integrale zorg en ondersteuning zet sterk in op preventieve actie en de mobilisering van verbindende krachten in de samenleving. Deze integrale zorg en ondersteuning kan pas gerealiseerd worden door het toegankelijk eerstelijnsaanbod te versterken over de sectoren en beleidsdomeinen heen (16)</i>
<i>La Déclaration de Politique Régionale 2014-2019 « Oser, Innover, Rassembler» précise les grandes lignes des politiques de santé à mettre en oeuvre. Celle-ci insiste sur le lien entre la promotion/prévention et les soins de première ligne ainsi que sur l’importance d’agir sur les déterminants de santé et de structurer l’offre en matière de promotion/prévention sur une base territoriale et cohérente. Les stratégies doivent être développées d’une part, avec les intervenants de première ligne et le secteur ambulatoire et d’autre part, avec tous les autres intervenants impliqués dans les déterminants de la santé globale en amont et en aval des problématiques de santé sans oublier les acteurs des autres domaines de vie du patient qui sont concernés par le problème de santé (32)</i>
<i>Le Gouvernement veillera particulièrement à mieux articuler les différents acteurs de la première ligne ainsi que les différentes lignes de soins (33)</i>
<i>Renforcer et mieux organiser la 1ère ligne de soins. L’objectif central du Plan Santé Bruxellois est d’assurer aux patients une prise en charge globale, intégrée, centrée sur leurs besoins et, dans laquelle ils entrent au bon moment dans chaque niveau de soins. Pour offrir ce parcours intégré et cohérent, il faut pouvoir disposer des services de santé suffisants, adéquats et organisés. La 1ère ligne de soins constitue le rassemblement des acteurs du secteur ambulatoire qui peuvent offrir l’approche à la fois généraliste et de proximité (41).</i></td></tr>
<tr><td>Reorganise primary care and prevention services</td><td></td><td>(16)</td><td>(32, 33, 35)</td><td>(41, 42, 44, 45)</td></tr>
<tr><td>Simplify the care system</td><td></td><td>(16)</td><td></td><td>(42)</td></tr>
</table>

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.3 Digital infrastructure

The documents analysed enabled us to identify certain objectives which are largely common to all governing authorities, both federal and federated. This includes the development of an electronic patient record and digital platforms enabling all providers involved in a patient's care to exchange health information with each other, as well as tools supporting intra- or interdisciplinary work.

Table 4 – Aims related to digital infrastructure

Aims	**Policy document**			
	Federal	Flanders	Wallonia	Brussels
Develop and implement a (shared) multidisciplinary electronic patient record	(2,3, 6,7)	(13, 19, 26)	(33, 35)	(41, 42)
Le dossier patient multidisciplinaire d'un patient est une application qui donne accès aux données pertinentes. C'est une fenêtre, donnant ou non droit d'écriture, qui donne accès aux données publiées dans les différents dossiers patients informatisés de divers groupes de prestataires ; ceci rend possible le partage de données entre prestataires de soins impliqués dans les soins intégrés aux patients chroniques ; l'information disponible à tout moment permet une meilleure analyse des besoins du patient, et en particulier dans les situations complexes (2) *In 2050 maken we in Vlaanderen algemeen gebruik van het elektronische patiënt(cliënt)dossier, dat gegevensdeling op een efficiënte en verantwoorde manier mogelijk maakt en daardoor de hoeksteen vormt van levenslange, geïntegreerde zorg. Een internationaal aanvaard kader voor privacy en toegangsrechten maakt dit mee mogelijk. Dankzij de combinatie van data-analyse en artificiële intelligentie kan de zorgbehoevende een behandeling op maat krijgen (13).* *We pleiten voor een gedeeld elektronisch patiëntendossier waaruit de zorgnood automatisch en objectief blijkt. Bij het delen van persoonlijke (gezondheids)gegevens met andere zorgactoren wordt gewaakt over een correcte behandeling van deze gegevens, waarbij toestemming van de patiënt, proportionaliteit en finaliteit binnen een therapeutische relatie wordt gegarandeerd (19).* *Le Gouvernement veillera particulièrement à intégrer le rôle du médecin généraliste dans les politiques de prévention et de promotion de la santé, notamment par la promotion du dossier médical informatisé via le Réseau santé wallon (33)* *La nécessité d'améliorer les parcours de soins décrits transversalement dans cet axe du Plan Santé Bruxellois implique une meilleure communication entre les acteurs de soins et entre les acteurs et leurs patients. L'échange électronique de données médicales peut jouer un rôle déterminant dans l'amélioration de la communication. La stratégie de l'e-santé en Région bruxelloise vise prioritairement le déploiement des outils de partage d'information entre prestataires et à destination du patient (notamment via le dossier santé partagée) (41)*				
Create an electronic platform to facilitate health data sharing	(6) (7)	(13, 15, 16, 19, 20, 24)	(33, 34, 35)	(40, 41, 42)
Un échange multidisciplinaire efficace entre les prestataires de soins et les établissements de soins n'est toujours pas opérationnel. Ce projet [échanges d'informations multidisciplinaires] est crucial pour la prochaine phase du plan e-santé car il doit, en effet veiller à ce que les informations sur les patients puissent être échangées par voie numérique entre les prestataires de soins, qu'ils fassent partie des mêmes groupes professionnels ou de groupes professionnels différents. Cette nécessité apparaît notamment très clairement au niveau des soins aux malades chroniques et dans le cadre des soins intégrés. (6)				

Aims	Policy document			
In het kader van geïntegreerde en multidisciplinaire zorg worden in een geïntegreerd patiëntendossier (GPD) gegevens verzameld die moeten toelaten om aan een patiënt de meest optimale zorg te bieden. Concreet ontbreekt er een wettelijke basis voor onder meer de volgende functionaliteiten: geïntegreerde agenda patiënt, dagboek voor communicatie tussen zorgverleners, BelRAI, zorgdelen, samenstelling zorgteam,… (General Policy Note Vandenbroucke) (7) *Een eerste bouwsteen hiervoor is Vitalink, het digitale platform ontwikkeld door de Vlaamse overheid voor het veilig en accuraat delen van gegevens tussen actoren in de zorg onderling en met de overheid. In de visietekst "e-Zorgzaam Vlaanderen" werd hiervoor een kader geschetst, dat nu uitvoering krijgt in het actieplan "Naar een e-Zorgzaam Vlaanderen". Inmiddels werd ook de oprichting van een Agentschap voor Gegevensdeling in de Zorg, waar de zorgverstrekkers, de zorgvoorzieningen en de zorggebruikers de nodige afspraken maken over ICT-samenwerking, decretaal verankerd (13).* *En parallèle à cette réorganisation des soins de première ligne, il est essentiel de digitaliser progressivement mais intégralement le dossier de santé des citoyens wallons de manière structurée et intégrée, en incluant l'ensemble de l'écosystème dans la dynamique (citoyens, soignants et établissement de santé, administrations, entreprises du numérique, scientifiques de la médecine mais aussi du droit, de l'économie, l'Autorité de Protection des Données...). Ce projet de mise en place d'un écosystème de santé numérique du parcours de vie et de santé du citoyen permet de répondre à différents défis. (34).* *La Commission communautaire commune a également permis la création des outils nécessaires au partage électronique de données. (…) L'outil d'échange électronique des données des patients, le Réseau Santé Bruxellois, a été largement soutenu ces dernières années. Le Réseau Santé Bruxellois et le coffre-fort multidisciplinaire se sont développés avec succès auprès des hôpitaux et des médecins généralistes, permettant à terme un échange de données aisé, sécurisé et fiable. Son développement doit être poursuivi (41)*				
Develop a e-health plan	(6,7)	(16, 20)		(41)
Het actieplan eGezondheid dat in januari 2019 goedgekeurd werd, zal verder worden uitgevoerd, en ook in 2021 worden geactualiseerd en gevalideerd door de Interministeriële Conferentie Volksgezondheid. (general policy note Vandebroucke) (7). *Un plan stratégique «e-santé» bruxellois a été pris en 2017. La stratégie de l'e-santé en Région bruxelloise vise prioritairement le déploiement des outils de partage d'information entre prestataires et à destination du patient (41)*				
Enable the use of data for research and monitoring	(7)	(16, 19, 20)	(35)	
We bouwen Vitalink, in samenwerking met E-health, verder uit tot een centrale gegevensdatabank die we toegankelijk maken voor geanonimiseerd onderzoek. (19)				
Support the digitalisation of care processes in mental health, rehabilitation, and palliative care sectors		(12, 15, 19, 20)		
Om meer evidence based practices te ontwikkelen binnen een geestelijke gezondheidszorg waarin de cliënt/patiënt centraal staat, is het van belang te weten welke gebruiker met welke zorgnoden en -vragen op welk moment welke zorg bij de verschillende sectoren en voorzieningen heeft gekregen. Met een betrouwbare en intersectorale registratie in de geestelijke gezondheidszorg willen we daaraan tegemoetkomen (20). *We bekijken of en op welke wijze we de registratie van de minimale psychiatrische gegevens (MPG) in de GGZ kunnen implementeren. We wachten evenwel eerst de resultaten van de verschillende onderzoeken inzake BELRAI en de beleidsvertaling van deze resultaten naar een mogelijke brede inzet van de BELRAI af. Op deze manier willen we de digitale gegevensdeling binnen de GGZ uniformiseren en verder uitrollen (15)*				
Generalise the use of the BelRAI assessment tool	(6,7)	(15, 16, 20)		
Verdere uitvoering wordt gegeven aan het protocolakkoord BelRAI van 26 maart 2018 (General Policy Note Vandenbroucke). (7) *BelRAI wordt als uniform inschalingsinstrument in de zorg geleidelijk aan uitgerold in de verschillende zorgsectoren in het kader van de Vlaamse Sociale Bescherming. (16)*				

Aims	Policy document	
Adapt communication technologies to different target audiences		(39)
Develop hospital ICT tools	(6)	(40)
Draw list of challenges for the future of e-Health and prioritise the measures to adopt	(6)	(41)

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.4 Process coordination

Coordination of processes is addressed in nearly all policy documents at both federal and regional levels. We extracted various objectives related to this dimension.

Table 5 – Aims related to process coordination

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Ensure coordination amongst providers through patient-focused dialogue	(2, 8)			
Optimaliser la coordination autour du patient (niveau micro) par l'organisation d'une concertation avec le patient (2)				
Develop “care coordinator”, “advisor/specialist point of contact” and/or “case manager” functions	(2)	(16, 28)	(34)	(41, 42)
Case-management : il s’agit de la gestion et la coordination de tous les soins médicaux, paramédicaux, psychologiques ou de bien-être nécessaires pour rencontrer les besoins du malade chronique ; bien que le case-management soit recommandé dès que le patient a besoin de plusieurs types de soins, dans de nombreux cas, le patient lui-même assure cette gestion (éventuellement soutenu par des aidants-proches) ; dans d’autres situations, un professionnel de soins qui a des contacts réguliers avec le patient comme son médecin traitant, l’infirmier qui le soigne, le travailleur social,... intervient à ce niveau ; l’ajout d’un « case-manager » spécifique auprès du malade chronique ne se justifie que dans des situations particulièrement complexes (quand la tâche est trop lourde pour être assurée par un des acteurs présents autour du patient ou par le patient lui-même) qu’il convient d’identifier correctement (2) ***Il existe aujourd’hui diverses organisations et personnes qui sont chargées de missions spécifiques de coordination, tant en termes de continuité de soins extra- et intra-murale que transmurale: les services sociaux, le référent hospitalier pour la continuité des soins, la liaison externe, les services sociaux, les coordinateurs de soins, les médiateurs de soins, ... ; leur action reste cependant souvent (trop) limitée, parfois par un manque de coordination, mais surtout par le fait que leur mission est fragmentée dans la mesure où elle est axée soit sur un groupe spécifique de patients (par exemple, gériatriques ou psychiatriques.), soit sur un épisode spécifique du traitement (par exemple, la sortie de l'hôpital) (2)*** ***Een zorgcoördinator fungeert als aanspreekpunt en behoudt het overzicht en zorgt dat alle zorg en ondersteuning wordt vastgelegd, afgestemd, opgevolgd en geëvalueerd. Bij voorkeur wordt deze taak opgenomen door de persoon met een zorg- en ondersteuningsnood zelf al dan niet bijgestaan door een ander lid van het zorgteam. Als dit niet mogelijk is wordt er binnen het zorgteam iemand aangeduid (16).***				

Traiter la thématique de l’intégration des systèmes de santé dans Get upWallonia est une opportunité unique qui permettra également de répondre aux enjeux à plus long terme tant dans la prévention des maladies chroniques, que dans l’orientation du citoyen vers le bon acteur ou son accompagnement dans des soins de longue durée. […] l’idée du « référent santé » pour chaque wallon est potentiellement implémentable rapidement (34). *Lors de la dernière décennie, les professionnels de santé, l’État fédéral et les entités fédérées ont développé une nouvelle approche des maladies chroniques. Il s’agit d’une démarche proactive, intégrée, multidisciplinaire et qui repose sur les dernières recommandations scientifiques. Trois piliers constituent cette approche : l’amélioration de la qualité ; la collaboration entre les différents professionnels amenés à agir autour du patient : médecin généraliste, médecins spécialistes et prestataires en donnant une place de coordinateur au médecin généraliste ; et la participation active du patient (empowerment et self-management) (41)*				
Develop spaces for dialogue and communication	(2, 10)	(14, 16, 28)		
Une concertation (échange d'informations et prise de décisions en concertation) est indispensable pour la coordination ("qui" intervient "quand" et "pour quoi faire") (2)				
Develop set of tools to enable multidisciplinary information sharing and facilitate process coordination.	(2, 3)	(16)		
Develop care pathways that facilitate continuum of care across all levels of health practices and/or between sectors, and promote interprofessional collaboration	(2)		(32, 33)	(40, 41)
Create local care & cure networks to facilitate articulation between levels of healthcare and/or between sectors			(33, 35, 38)	

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.5 *Finance & funding*

The main objectives related to financing that emerged from the different policy documents include developing a value-based approach to health care, developing new ways of funding, and empowering stakeholders.

Table 6 – Aims related to finance and funding

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Develop value-based healthcare	(2,3)			
Continuer à évoluer vers des soins de santé value based, où les prestataires et les établissements de soins prendront pleinement leur responsabilité en étroite collaboration, afin de dispenser des soins de qualité dans le respect des budgets alloués (réseaux accountable care) ». Les réseaux accountable care sont définis comme « un groupe de prestataires (auparavant indépendants) qui collaborent pour dispenser et coordonner des soins pour une population spécifique de patients. Les prestataires assument collectivement la responsabilité de la dispense de soins corrects au moment opportun, pour obtenir ainsi de meilleurs résultats (3).				
Develop new funding models	(2,3,7)	(16, 27)	(36)	
Développer des modalités de financement innovantes qui garantissent la qualité des soins le rapport coût-efficacité et la collaboration dans le secteur (2) *In het kader van persoons- en populatiegerichte zorg, de rol van de burger/patïent in zijn zorg, het experimenteren met alternatieve vormen van financiering die het geïntegreerd samenwerken tussen zorgverstrekkers en -instellingen kunnen bevorderen. (General policy note Vandenbroucke) (7)* *Een geïntegreerde zorgorganisatie vraagt een geïntegreerde financiering van die zorg. Een dergelijke financiering zet in op de toegankelijkheid van de zorg, kwaliteit van zorg, interdisciplinaire samenwerking, het afstemmen van de zorg op het bevorderen of behouden van de autonomie en regierol van de persoon met een zorgnood. Persoonsvolgende financiering is hierin volgens de Vlaamse overheid een belangrijke hefboom (16)* *Réalisation de programmes multi-annuels de financement de projets de recherche au travers d'aides guichet, d'appels spécifiques mono ou multipartenaires ou de mécanismes nouveaux (consortia thématiques)…(36)*				
Develop new funding models for hospitals and other institutions	(7)		(34, 35)	(40)
Empower stakeholders by sharing financial responsibility	(7)			
La norme de croissance ne sera plus répartie dès le départ et affectée aux différents objectifs partiels, mais qu'après concertation médico-sociale, des choix spécifiques seront faits à cet égard (par exemple, l'extension du paquet assuré, l'amélioration de l'accessibilité, le renforcement de la première ligne, l'amélioration de la qualité), l'introduction de l'innovation au service du patient, ou encore permettre la gestion du changement et la promotion des soins intégrés (7)				

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.6 Removal of inhibitors (removing obstacles)

The process of integrating care involves profound changes at all levels - relational, organisational, decision-making, and financial levels. But this is rarely formulated as aims in the policy documents. To overcome these perceived obstacles to change, authorities will focus on supporting the change process at micro, meso and macro levels.

Table 7 – Aims related to removal of inhibitors

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Support the change process at all levels (micro, meso, macro)	(2)	(12)		
La gestion correcte des changements ("change management") permettra l'acceptation, le soutien et le maintien de ceux-ci. C'est la clé pour consolider et pérenniser toutes les actions et interventions entreprises dans le cadre des projets pilotes : construire progressivement une vision partagée sur le long terme (revirement culturel) ; ancrer structurellement le changement sur le terrain (revirement structurel) ; susciter l'acceptation du changement au niveau de la société et des patients individuels ; susciter la perception du changement au niveau de la société et des patients individuels ; garantir une transparence accrue quant à la qualité des soins (2)				

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.7 Population approach

Table 8 – Aims related to population approach

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Promote a population approach within the healthcare system	(3)			
Define target population(s)	(2, 7)			(39, 40,41, 42)
La démarche de stratification des risques au sein d'une population, sur un territoire bien délimité, doit permettre d'identifier les lacunes dans l'offre d'aide et de soins, compte tenu du profil de population, de repérer les initiatives à prendre et de se fixer des priorités. Elle doit permettre de proposer des soins de manière proactive en anticipant les éventuels besoins futurs, dans le but de maintenir le patient le plus longtemps possible dans sa strate actuelle (2).				
Identify the specific risks and needs of the population living in the geographical care zone, as well as available or missing resources	(2)	(14, 29, 30)		
Develop an area-specific action plan for the care area concerned. The care plan should include intended results and outcomes and the indicators for evaluating the actions	(2)	(14, 16)		

Develop tools (e.g., population dashboard) and implement them to facilitate decision-making at the care area level.	(2)	(16)		
Een analyse van het beschikbare aanbod aan zorgaanbieders en middelen en tevens van de noden en risico's van de populatie: aantal ouderen, personen met een chronische ziekte, functionele toestand, verslaving… De eerstelijnszones dragen bij aan het uitvoeren van deze analyse. Daarnaast worden ook gegevens uit onderzoek, klachten, kwaliteitsmetingen, BelRAI, informatie van patiënten- en gebruikersverenigingen, … meegenomen. Voor het in kaart brengen van de noden en behoeften van de populatie en het bepalen van de doelstellingen voor de zorgverlening en een optimale ontwikkeling van het zorgaanbod in de eerstelijnszone wordt een methodiek ontwikkeld (door KU Leuven en Deloitte). Bij het lokaal toepassen en analyseren van de resultaten zal de eerstelijnszone begeleid worden vanuit het Vlaams Instituut voor de Eerste Lijn (16)				

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.8 *Citizen empowerment*

The notion of citizen empowerment is present in the formulation of different objectives in several of the plans outlined by federal and federated entities but is more developed in documents drafted by regional authorities, especially since the the Sixth State Reform and the new distribution of competences. All governments present patient empowerment as a common general objective, particularly as it relates to patients with complex needs or mental health problems.

Table 9 – Aims related to citizen empowerment

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Reinforcing patient empowerment and autonomy	(2, 7)	(12, 13, 15, 16)	(32)	(39, 41)
Empowerment du patient : donner à chaque malade chronique le soutien et l'information nécessaires pour lui permettre, dans la limite de ses capacités et en fonction de ses propres objectifs et motivations, de se prendre en charge et d'avoir un rôle actif dans son processus de soin et dans sa vie (self-management) ; ceci suppose de l'informer (concernant la maladie et son évolution, le traitement et ses effets potentiels, les modalités de soutien et services disponibles), de l'écouter (ses préférences, motivations et objectifs, ses préoccupations) de le former (apprentissage de certaines procédures, apprendre à reconnaître des symptômes, …), de le soutenir (pour atteindre certains objectifs ou adapter ses propres limites, conserver ou accroître son autonomie), d'évaluer ses capacités, … (2) ***Het gaat ook om het bevorderen van health literacy of gezondheidsvaardigheden. Om in staat te zijn te zorgen voor je eigen gezondheid. Maar ook het begrijpen en het verlagen van barrières die worden veroorzaakt door ons zorgsysteem. (General Policy Note Vandenbroucke) (7)*** ***Om een persoonsgerichte en geïntegreerde zorg*** ***te kunnen aanbieden, stelt de Wereldgezondheidsorganisatie vijf strategieën voor: Empowerment en betrekken personen met een zorgnood; 2. Duidelijke***				

aansturing en verantwoording; 3. Heroriënteren van het zorgmodel; 4. Zorgverlening georiënteerd op de noden van personen; 5. Het mogelijk maken om de verschillende stakeholders samen te brengen om de hervorming te verwezenlijken. (16) ***Renforcer l'action communautaire, promouvoir la participation citoyenne et l'empowerment (32)*** ***Le Gouvernement garantira dès lors à toute personne en perte d'autonomie une offre de services et de soins disponible et accessible, lui assurant de garder cette autonomie le plus longtemps possible. Il mettra en place et généralisera pour ce faire – dans le cadre du décloisonnement institutionnel évoqué plus haut – un modèle intégré d'aide et de soins de proximité, par quartier, visant le maintien à domicile des personnes en perte d'autonomie (41)***			
Encourage patient participation by including them in advisory and decision-making structures and health care institutions	(2, 7)	(25)	(39, 41, 42)
Binnen de eigen structuren van het RIZIV bestaat de behoefte tot de oprichting van een "platform voor de patiëntenorganisaties", o.a. om een rechtstreekse dialoog met de patiëntenorganisaties en het RIZIV…(General policy Note Vandenbroucke) (7) ***Patiënten of patiëntenvertegenwoordigers zullen meer systematisch betrokken worden in het kader van het onderzoek van het KCE. (General policy Note Vandenbroucke) (7)***			
Promote health literacy of target populations		(12)	(39,42)
Bijzondere en concrete aandacht gaat naar hulpmiddelen voor kwetsbare en/of gediscrimineerde publieksgroepen: toegang tot informatie voor de zorgverleners die ze opvolgen, interdisciplinaire coördinatie, overleg tussen de partners op lokaal niveau. Begeleidingstools staan ter beschikking van de partners uit de eerste lijn die voor deze publieksgroepen een proactieve inclusiestrategie wensen te ontwikkelen. (42)			

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.9 Evaluation methods

At federal and federated levels, reform entails both an internal and external process and results evaluation.

Table 10 – Aims related to evaluation methods

Aims	**Policy document**			
	Federal	Flanders	Wallonia	Brussels
Implement and evaluate (integrated care) projects	(2, 4)			
Evaluate health and mental health reforms		(18, 29)		
Establish and promote a culture of quality and evaluation	(2, 7)		(32, 34, 35)	

Evaluer la performance globale du système, les changements induits par les projets-pilotes, ainsi que toute initiative visant le soutien et la promotion des soins intégrés (formation, dispositif réglementaire, valorisation des résultats, actions de communication…) L'auto-évaluation s'inscrit dans l'objectif d'aboutir à une culture de la qualité et non à une évaluation ayant pour but un contrôle administratif. (2).

Veiller à l'efficience des actions et instaurer une culture d'évaluation continue (32)

Intégrer les politiques de promotion de la santé et de prévention en matière de santé et investir dans des outils de gestion et de monitoring de la santé publique en Wallonie. (35)

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.10 Breadth of ambition

The final ambition sought by the process of integrating care and identified in most documents and policy declarations, is the concept of Triple Aim + 2, where also the term Qadruple aim was used, but now evolved to a quintuple aim. This is broken down into seven main objectives.

Table 11 – Aims related to breath of ambition

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Improve continuity of care	(2, 3, 7)	(14, 16, 20)	(32, 35)	(41)

Continuité des soins extra-, intra- et transmurale : il existe aujourd'hui diverses organisations et personnes qui sont chargées de missions spécifiques de coordination, tant en termes de continuité de soins extra- et intra-murale que transmurale: les services sociaux, le référent hospitalier pour la continuité des soins, la liaison externe, les services sociaux, les coordinateurs de soins, les médiateurs de soins, … ; leur action reste cependant souvent (trop) limitée, parfois par un manque de coordination, mais surtout par le fait que leur mission est fragmentée dans la mesure où elle est axée soit sur un groupe spécifique de patients (par exemple, gériatriques ou psychiatriques.), soit sur un épisode spécifique du traitement (par exemple, la sortie de l'hôpital) (2)

Een minimumpakket aan basiszorg moet door elk individueel ziekenhuis opgenomen worden. Gezien de nood aan continuïteit van zorg voor de betrokken basiszorgdoelgroepen is een sterke lokale interactie met de (toekomstige) eerstelijnsstructuren van cruciaal belang (14)

Geïntegreerde zorg en ondersteuning is de samenwerking op operationeel en organisatorisch niveau van alle betrokken zorg- en welzijnsactoren en initiatieven van vrijwillige en informele zorg- en welzijnsactoren in het streven naar een samenhangende en continue zorg voor en ondersteuning van de persoon met een zorg- en ondersteuningsvraag en zijn mantelzorgers, waarbij de zorg- en ondersteuningsvraag en de context van de persoon met een zorg- en ondersteuningsvraag het uitgangspunt vormen tijdens de hele levensloop (16)

Permettre de répondre aux enjeux à plus long terme tant dans la prévention des maladies chroniques, que l'orientation du citoyen vers le bon acteur ou son accompagnement dans des soins de longue durée (35)

L’approche « parcours de soins » place la réflexion stratégique dans l’optique d’un continuum promotion de la santé/prévention des maladies/soins curatifs et réduction des risques/revalidation (accompagnement)/soins palliatifs (32)

Il n’est plus question d’aborder la prise en charge comme une suite d’actes isolés. L’approche par parcours de soins privilégie la transversalité, la coordination entre les acteurs et l’intégration du patient à sa santé, tout en conservant la liberté de choix du patient. Chacun doit pouvoir trouver une réponse adéquate à ses besoins, sans rupture dans la continuité de la prise en charge et sans redondance des moyens mis en oeuvre. L’approche est exigeante, car elle nécessite de revoir les modes de fonctionnement de l’ensemble des acteurs et de sortir du cloisonnement entre acteurs et entre secteurs. (41)

Strengthen links between health and social care	(2, 3,4)	(13,20,24,28,19)	(32)	(41)

Le besoin de concertation et de coordination est reconnu depuis longtemps et a déjà donné naissance à divers services, structures ou plateformes, tant dans le domaine médical que dans le domaine social (…) Intégrer les principes des soins intégrés dans les autres domaines, disciplines et secteurs, tels que dans l’enseignement, le bien-être / l’aide aux personnes, le travail social, la gestion publique, etc.(2)

We zetten sterk in op buurtwerking en op vermaatschappelijking van de zorg. We maken daarbij ook de koppeling met het lokaal sociaal beleid en de regierol van lokale besturen. We willen zo ook een antwoord bieden op de toenemende eenzaamheid in onze samenleving (20).

La promotion de la santé ne peut se déployer pleinement sans le concours des autres secteurs, notamment les suivants : action sociale, environnement, logement, justice, enseignement, emploi, mobilité, aménagement du territoire et développement durable. La responsabilité de la Wallonie est par conséquent d'être proactive pour décloisonner les secteurs, quel que soit le niveau de pouvoir compétent, et pour prendre le leadership en matière de promotion de la santé. (32)

Dans ce cadre, une approche intégrée et de proximité sera développée. Elle consiste à recréer un maillage social et une approche sanitaire préventive, au plus près des souhaits et des besoins des personnes plus âgées, pour leur permettre de rester à domicile dans de bonnes conditions (41).

Strengthen links between individual and community care		(19, 20)		(41)
Strengthen care pathways across sectors	(3)	(14, 29, 30)		
Include health priorities as part of a life-long patient approach		(16, 18, 29, 30)	(32)	

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.11 *Innovation management*

In the examined policy documents, innovative management related mainly to innovative models of organisation (networking) and e-Health applications (digitalisation). Encouraging and developing social innovations appears in some regional documents, but only succintly.

Table 12 – Aims related to innovation management

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Promote experimental rollout of innovative practices in the organisation of care	(2)	(12)		
Het Flanders' Care-programma werd gelanceerd tijdens de vorige regering. Het doel was om de vooruitgang in wetenschap en technologie toe te passen in de zorgsector en tegelijk een economische meerwaarde te creëren voor Vlaamse bedrijven. De missie van Flanders' Care illustreert dit duidelijk: "Het aanbod van kwaliteitsvolle zorg aantoonbaar verbeteren en verantwoord ondernemerschap in de zorgeconomie stimuleren door innovatie (12)				
Develop ICT technologies in public health services	(6)	(12, 13, 19)	(35, 36)	
Pour un système de santé efficace et accessible à tous, l'utilisation des technologies numériques doit être renforcée dans tous les domaines touchant à la santé (l'hôpital mais aussi la première ligne de soins). Ceci nécessite des avancées technologiques mais aussi la sensibilisation et la formation de tous les intervenants et une meilleure interconnexion entre maillons de la chaîne. (…) La réflexion sur de nouveaux modes d'organisation des structures de santé sera également encouragée et soutenue. Par ailleurs, ces interconnections de réseaux, permettront de développer le patient connecté de demain, bien informé de sa santé, des parcours de soins possibles… (36).				
Support technological and social innovation within the provision of care by building bridges between the health industry, care institutions and patients	(2)	(12, 13)	(36)	(41)
Chaque projet (projet pilote Soins intégrés) définira lui-même son public-cible parmi le large groupe des 'malades chroniques'. Le projet (pilote Soins intégrés) veillera à ce que celui-ci soit suffisamment diversifié. Au sein des projets (pilote Soins intégrés), divers acteurs travaillent ensemble, y compris des organisations de patients. Les projets peuvent également décider d'associer une entreprise dans la mesure où elle apporte une valeur ajoutée au développement du nouveau modèle de soins. Ceci peut être le cas lorsqu'il s'agit d'implémenter de nouvelles technologies (2) ***Het Flanders' Care-programma werd gelanceerd tijdens de vorige regering. Het doel was om de vooruitgang in wetenschap en technologie toe te passen in de zorgsector en tegelijk een economische meerwaarde te creëren voor Vlaamse bedrijven. De missie van Flanders' Care illustreert dit duidelijk: "Het aanbod van kwaliteitsvolle zorg aantoonbaar verbeteren en verantwoord ondernemerschap in de zorgeconomie stimuleren door innovatie."(12)*** ***La transformation du système de santé au sens large appelle la mise en œuvre d'innovations basées sur la technologie en interaction avec l'humain. L'objectif de ce DIS (domaines d'innovation stratégiques) est de combiner les atouts dont dispose la Wallonie en matière de biotechnologie et de technologies médicales avec les forces de recherche et d'innovation dans une série d'autres domaines et avec d'autres acteurs, en incluant ceux de l'éducation à la santé, pour développer des innovations multidisciplinaires au service de ce système de santé de pointe et inclusif. Une approche plus préventive se conjugue avec une***				

plus grande responsabilité du citoyen et/ou patient dans la gestion de sa santé – un système centré sur le patient – pour lequel des technologies, notamment numériques, sont disponibles et présentent un potentiel en matière d'acquisition, de gestion, d'interconnexion et d'interopérabilité des données de santé. Outre les impacts sur la santé des Wallons, de larges impacts économiques sont attendus grâce au développement de nouveaux produits et solutions pour des marchés en croissance : la santé à domicile ; le e-Health (santé électronique) et m-Health (santé mobile) ; la Silver economy ; la prévention pour la santé. Autant de domaines qui requièrent tant l'innovation technologique que sociale (36).

La Région bruxelloise est un terreau fertile pour l'innovation qu'elle soit sociale ou technologique. Cette créativité doit être soutenue et intégrée le plus rapidement possible dans les parcours de soins. L'e-santé est un exemple d'un outil qui aide à la transformation des pratiques de soins, ouvrant les possibilités de partage d'informations, de multidisciplinarité. La recherche et l'innovation industrielle doivent aussi converger vers les objectifs de santé publique (41).

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.12 Capacity building

The aims found in several policy documents and primarily related to skills development are grouped under four main objectives.

Table 13 – Aims related to capacity building

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
Strengthen basic education and training of health care professionals	(2)	(12, 16, 20)	(32)	
Orienter la formation dans les soins de santé vers un modèle de coopération qui se base sur les compétences de chaque prestataire de soins (2)				
Develop and increase continuing education	(2)	(13, 16)		
Support and promote knowledge sharing	(2)	(13, 14)	(34)	(41)
Encourager une culture qualité, c'est soutenir une démarche de développement – volontaire et collective – axée sur l'auto-évaluation, l'apprentissage et l'amélioration continue des pratiques et des processus. Cette démarche de développement doit s'envisager comme un processus permanent orienté vers la réduction progressive des points faibles – au regard de l'approche intégrée des soins – et la consolidation des points forts, notamment à travers le partage des connaissances et la diffusion des pratiques innovantes (2) *Het programma intersectorale consult en liaison ten slotte, focust op het uitwisselen en samen inzetten van expertise. Meer concreet wordt er geïnvesteerd in wederzijdse intervisie en supervisie, permanente vorming, specifieke opleidingen op team-, organisatie- en netwerkniveau, evenals in stages, workshops, personeelsuitwisseling… (14)* *Les réseaux locorégionaux pourront s'interconnecter au sein d'une coupole régionale pour développer une dynamique d'apprentissage et de partages d'expériences, développer, dans une logique bottom-up, un référentiel d'intervention partagé et constituer à terme une infrastructure résiliente facilitant la réactivité des autorités sanitaires, particulièrement importante en cas de crise (34)*				

L'objectif est de favoriser une plus grande utilisation des connaissances disponibles afin d'apporter des changements dans les pratiques et la prise de décision : participer à diffuser la culture de la promotion de la santé et les connaissances produites ; organiser et mettre à disposition de la documentation, des données et informations destinées à soutenir les acteurs psycho-socio-médicaux et les décideurs politiques ; soutenir les acteurs en ce qui concerne l'évaluation des actions en termes de processus, de résultats et de transférabilité des bonnes pratiques, avec une attention particulière pour les projets innovants (41)				
Continue research efforts related to integrated care	(2)			
Ensuring the necessary recruitment of staff in the health professions	(7)	(12, 16, 20)	(34)	(41)
Un certain nombre de conditions préalables doivent également être remplies : sauvegarder le capital humain, notamment en accélérant la formation (continue) des professionnels qui sont polyvalents, sécuriser les ressources matérielles et assurer une bonne gouvernance. (…) Nous commençons la législature avec un financement complémentaire significatif des soins de santé, en plus de la norme de croissance légale. Il s'agit principalement de renforcer les flux entrants et de limiter les flux sortants de personnel de santé. Le fonds blouses blanches récemment créé prévoit ainsi un budget de 402 millions d'euros pour financer la création d'emplois pour le personnel de santé, l'amélioration des conditions de travail du personnel de santé et la formation des infirmières et infirmiers. Nous continuons cet effort (7) *We investeren in voldoende competent zorgpersoneel om ook in de toekomst kwaliteitsvolle zorg en dienstverlening te kunnen bieden (…) We blijven inzetten op werkbaar werk in de zorgsector, o.a. door het actieplan 4.0. werken aan werk in de zorg. Samen met de beleidsdomeinen Werk en Onderwijs voeren we een geintegreerde aanpak om de instroom binnen de zorgsector te vegoten en het retentiebeleid te verbeteren om aan de nijpende vraag naar personeel tegemoet te komen (20)* *A court terme, il se focalisera d'abord sur les métiers considérés comme les plus critiques pour la filière et générant des embauches rapides, il définira les référentiels de compétences pour les principaux métiers à recruter, clarifiera les rôles et responsabilités de chaque acteur intervenant dals la formation et communiquera sur les possibilités de formation et de recrutement (34)* *La commission communautaire commune doit œuvrer à ce que la Région dispose des ressources humaines professionnelles nécessaires, accessibles et adéquatement réparties sur le territoire (41)*				

** the numbering refers to the numbering used in the section 2.3.1*

2.3.2.13 Identification of coherence between policy documents

We can consider that there is (overall) coherence when an aim is identified in policy documents of the different federal and federated entities.

We notice such a level of overall coherence within and between policies from the federal and federated entities on at least 13 aims, spread over different SCIROCCO dimensions. This level of coherence is also illustrated by the number of policy documents in which these aims are formulated.

Table 14 – Example of Aims on which there is overall coherence

Aims	Policy document			
	Federal	Flanders	Wallonia	Brussels
1. Change the current healthcare paradigm	(2,3,7)	(13,16,19, 20)	(33)	(41)
2. Ensure all policies include healthcare	(2,3,7)	(13, 19, 20)	(32)	(41)
3. Define territories and networks to structure provision of care	(2, 3, 4, 5, 7)	(14,16,20,29)	(33)	(41, 42)
4. Reinforce patient empowerment and autonomy	(2,7)	(12,13,15,16)	(32)	(41)
5. Reinforce the role of primary care	(1, 2, 7)	(16, 20)	(32, 33)	(41, 42, 44, 45)
6. Develop multidisciplinary electronic patient record	(2, 3, 6,7)	(13, 19, 26)	(33,35)	(41, 42)
7. Facilitate data sharing between health care professionals and institutions	(6,7)	(13,15,16,19, 20, 24)	(33,34,35)	(40, 41, 42)
8. Develop “care coordinator”, “advisor/specialist point of contact and/or “case manager”	(2)	(16, 28)	(34)	(41, 42)
9. Improve continuity of care	(2, 3, 7)	(14,16,20)	(32,35)	(41)
10. Strengthen links between health and social care	(2,3, 4)	(13,19,20,24,28)	(32)	(41)
11. Support technological and social innovation by building bridges between the health industry, care institutions and patients	(2)	(12, 13)	(36)	(41)
12. Support and promote knowledge sharing	(2)	(13, 14)	(34)	(41)
13. Ensuring the necessary recruitment of staff in the health professions	(7)	(12, 16,20)	(34)	(41)

2.4 Discussion and conclusions

The objective of this part of the report was to identify policy aims in the field of IC through a documentary analysis of policy documents published by federal and federated authorities in Belgium. It was also the intention to provide insight on the vision(s) that federal and federated entities share, or not, on the different dimensions of IC. The number of identified documents and policy aims confirms that the implementation of IC in Belgium has been the subject of the different Belgian governments' policy agendas for more than a decade.[112] Due to the large number of documents published by the different governing entities over the last ten years, a selection of 45 key documents was done based on selection criteria described above. Most of the selected documents are "policy" documents (i.e. 29), including strategic and operational aims in the area of IC and are mainly titled as "plans". The other documents (i.e. 18) are more legislative in nature, such as regional or royal decrees. The analysis of these documents allowed us to identify an important number of aims that were classified according to the 12 dimensions of the SCIROCCO assessment tool. From this analysis, a series of key observations emerged. The key observations are discussed below.

2.4.1 Consistency in policy documents of both federal and federated entities despite different emphasis

We first observed, that overall, federal, and regional (reform) plans refer to the Triple Aim +2, the quadruple aim and more recently the quintuple aim concept (though not always explicitly), as is also observed in recent healthcare system reforms in other European countries.[113] Consistency was observed in several polic aims: the federal and regional authorities want to **strengthen the role of primary care**, considered the cornerstone of the health system, and to **ensure that all policies include healthcare (Health in all policies)**.

Another key objective for the federal and federated entities, is improving **continuity of care**, particularly for chronically ill patients and during transitions in their care pathways. More specifically, the objectives focus on the articulation between extra, intra and transmural care, as a requirement to improve the quality of care.

Moreover, the different entities all agree on the need to improve collaboration **between care and social** organisations and between sectors, by developing a collaborative network of services. The different entities all agree on the need for IC, and on IC as a better solution for health and social care services and institutions to face the growing societal burden of chronic disease management and ageing of the population. On possible avenues to support this change the policy documents often mention the need **to change the current healthcare paradigm,** and the necessity to adapt the current legislative framework. Moreover, all authorities apply the concept of a participatory approach when starting a reform (stakeholder consultation, pilot projects). Another aim common to federal and regional authorities concerns the decompartmentalisation of **health and social care services** which, until now, were organised by sector.

Nevertheless, reinforcing **citizen empowerment** is an aim found across all the health plan reforms whether federal or federated, but is largely more developed in documents pertaining to regional objectives, more specifically those relating to health prevention and promotion, which were published by regional governments during the standstill period that followed the Sixth State Reform. This is related to the fact that prevention and promotion is a regional competence. Strengthening patient empowerment is a central aim of the Flanders government's vision of IC as formulated in different policies, especially those concerning the primary care and mental health sectors: for instance, the development of "experts by experience" in 2017 (from the Dutch ervaringsdeskundige). This dimension of IC is also part of the 11 strategic objectives set out in Wallonia's health prevention plan, although it clearly is not as central as it is in the Flanders' documents. As for the Brussels entity, patient empowerment is mainly developed by encouraging patient participation in the health care system through health literacy and the propagation of effective and pertinent information on health care services.

Over the past ten years, various federal and regional governments have formulated a common objective to restructure health care services within specific **territories,** and reorganise them by creating networks of care (e.g. primary care zones in Flanders, hospital networks, local multidisciplinary networks, integrated home services, palliative care platforms, mental health care networks).

In terms of **e-Health development**, the federal and federated authorities aim to develop **multidisciplinary electronic patient records and digital platforms** enabling interprofessional patient data sharing. These are considered essential components of IC, as other ICT applications to healthcare. In this way, the development of technological and social innovation are also encouraged by the different governmental authorities, throughout the **building of bridges between the health industry sector, care institutions and patients**.

The **coordination of care processes** is addressed in various policy documents at both federal and federated levels as a key domain of IC development by implementing new roles and new functions, creating spaces for dialogue, and developing tools. However, the terminology used by each authority to define some of the new functions is somewhat confusing but do appear to agree on how to define roles such as 'care coordinator' and 'case manager', in great part thanks to the rollout of several pilot projects which have tried to develop these new functions in Belgium, specifically for chronic and/or frail elderly patients. [114,115,112]

Three elements appear as indicators of **readiness to change**. They are not clearly formulated as aims, but rather as means to support the changes deemed necessary by the different governing authorities. Both federal and regional policy documentation clearly outline the need to change the healthcare paradigm from the current compartmentalised model to an integrated one. This is explicitly included in the hospital Funding Reform Plan (2015),[36] the Brussels health reform (2019),[102] in the VISIE 2050 report published by the Flanders government,[74] and in the regional development concept laid out by the German-speaking community. Wallonia, on the other hand, is less explicit in its political declaration (2019) on how it formulates the need for an ambulatory model for the provision of health and social care services in the patient's place of residence.

We can therefore conclude that there is a **general consensus** among the different governing entities on **the need for IC**, and on IC as the the way forward for health and social care services in face of mounting societal burden of chronic disease management and ageing of the population. The need to adapt the current legislative framework also appears in different federal documents and is also translated and included in several regional documents (but not in the Walloon documents).

The Joint Plan (2015) also mentions the adoption of a participatory approach as a key avenue to guide and achieve the desired changes in the health system. This approach was adopted in the primary care reform plan in Flanders (2019) and included in the formulation of a similar regional concept in the German Community (2008). More recently, the launch of the Get Up Wallonia! programme (2021) is the fruit of a successful citizen-wide dialogue and consultation centered around 5 main strategic lines. Finally, the rollout of experimental pilot-projects as a methodology to drive change is broadly embraced by the Federal Government and all regional authorities.

In terms of **evaluation**, the building a "culture of evaluation" is present in several policy documents. It was beyond the scope of the research described in the current chapter to assess if sufficient time, effort and attention is given to these results by policymakers and adjust their policies accordingly.[116] Indeed, evaluation results can guide governments in their decisions and policy direction, but the dissemination and appropriation can take a long time. However, evidence from the UK showed that building a "culture of evaluation" can be challenging, especially when the results of the evaluation questions the policy decisions previously taken.[117]

From the standpoint of federal and federated governments, **innovation management** is mainly related to developing innovative organisational models (networking) and e-Health applications (digitalisation). Social innovations are primarily limited to new collaboration models as formulated in policy aims.

Federal and regional documents also highlight **the need to have sufficient skilled health care providers** available, and adapt basic **training** of health and social professionals, particularly in the areas of empowerment, coordination, quality improvement and multidisciplinary collaboration. These governing entities also agree on the importance of developing and encouraging continuing training and education in the different dimensions of IC, as well as knowledge sharing between the different sectors.

Other aims have been identified as essential components for the development of IC in Belgium, but are not shared by all federal and federated authorities. It is, for instance, the case of to find new **funding mechanisms** that can support IC are under study or some (partly) implemented in Belgium. Different hospital funding models are being experimented through several pilot projects. Since 2018, a "Pay for Performance" program was launched in the hospital sector, rewarding hospitals financially if they achieve good results, though only for a limited budget.[114] Since 2009, a royal decree has defined the modalities for financing care pathways (renal insufficience and diabetes type 2), though this is no bundled payment as each professional is payed individually.[115] In Flanders, a personal finance system to support people with disabilitiesis already in place. The main objective of these innovative funding systems is to develop a value-based approach to health care. Although most of the new financial arrangements suggested in the Joint Plan (2015) are not yet structurally implemented in Belgium, the introduction of new models of health care funding remains of crucial importance for the implementation of integrated care. Indeed, the current financing system is considered as one of the main obstacles hindering the development of IC in the country.[112]

2.4.2 *The complexity of Belgium's governance structure and its impact on integrated care policy*

Successive state reforms are known to have gradually increased the fragmentation and complexity of health care governance between federal and federated entities. Similarly other countries such as Switzerland observed that fragmentation challenges the integration of care.[113] The complexity of the Belgian State structure and the division of power has contributed to the difficulties in aligning objectives and actions across different authority levels. Related to his complex Belgian governance structure we make two main observations regarding the formulation of policy aims.

First, the multiplicity of the policy making structure results in relevant policy documents being scattered across different government websites, if not occasionally untracable. Consequently, it is very difficult to gain an overall and comprehensive overview of the different visions of the Federal and federated governments in Belgium. Not only is this problematic for researchers trying to provide a comprehensive review of the policy aims in the area of IC in Belgium, but it also poses a problem for citizens in general who in turn find it difficult to gain a clear picture of the future of the country's health system.

Second, despite the complexity of Belgium's governance structure, we have observed **some level of consistency across various policy contents.** Our review shows that over the past ten years, numerous federal and federated entities' policies directly or indirectly relate to the development of IC in Belgium. These are delineated chronologically and succinctly, by level of authority, in the first section of this chapter. After closer analysis, we found that a number of documents selected were overall aligned, especially those published after the Sixth State Reform (2014). This level of consistency can certainly be attributed to the central role played by interministerial conferences (IMC) in formulating joint plans suchas the Joint Plan on chronic care (2015), the Hospital Reform Plan (2015) and the e-Health Action Plan (2019). These joint plans have played a role in guiding further documents publised by federated entities aligned with the visions expressed in federal documents.These plans have in common that they are centered around the need to change the current healthcare paradigm into a more integrated one, as evidenced by aims related to readiness to change; and consistently acknowledge that the implementation of experimental pilot-projects proves to be the most relevant approach to test innovative organisational practices.

We thus observe a tendency, over the last ten years, to focus on consistency and developing coherent visions throughout policy documents, specifically in the area of IC for the period from 2015 to 2019. In fact, after the the Joint Plan (2015) was published, which was approved by the federal and federated governments, authorities from the federated entities subsequently aligned their vision on the joint plan's main vision lines. The same can be observed with the hospital reform. For instance, after the federal minister published its reform plan, federated entities subsequently formulated their own plans to reorganise hospital collaboration through "care & cure networks". It can be deduced that over the years as power became more divided across the entities (but also fragmented), the more efforts were needed to align policy goals.

The Joint Plan of 2015 is essentially the first to lay out a shared vision on IC in Belgium. In this plan, it is clearly formulated, by the 18 components of IC that are presented and defined (see introduction), that this paradigm shift requires progressive implementation at micro, meso and macro levels. The Joint Plan is the sole document in which change is recognised as an iterative process. It is also evident that these 18 IC components are very similar to the 12 dimensions delineated by the SCIROCCO tool used to assess the maturity of a Western health system and its readiness to become more integrated.

But contrary to the common vision presented in the Joint Plan, the federated entities continued to publish a series of single-sector documents, particularly after the Sixth State Reform of 2014. For instance, each region published its own strategic document on prevention and health promotion, on the reorganisation of mental health care, and on e-Health. This confirms that while the different federal and federated entities can agree on broad guidelines, each federated entity also developed its own vision on how to implement the expected changes. This is illustrated in the way regional authorities formulate their vision on how to reorganise care and cure on a geographical basis. While they agree on principles/vision, when it comes to work in the devolved arena, the regions tend to take their own avenues.

2.4.3 Limitations of the policy documents review

A first limitation is that the collection, selection of key policy documents as well as the selection of aims cannot be considered exhaustive as it used an iterative, non-systematic search method. Only policy documents published in the time period 2012 till September 2021 were considered. Therefore the most recent initiatives such as the multi-year budget trajectory of the RIZIV-INAMI linking health goals to multi-annual budgets, with its report published in February 2022,[118] as well as the federal hospital reform aiming for more transparency in funding and incentives for quality of care, launched in January 2022,[119] as well as very recent regional initiatives[93] were not considered in this document analysis.

As integrated care has a lot of different dimensions, it would lead to a very long list of key words, therefore a large number of documents to examine. Due to time constraints, we had to find a strategy to reduce the number of policy documents from the initial selection of 120 documents.Therefore, we first identified (through a keyword search) and then examined in detail those documents in which the concept of integrated care was mentioned explicitly. However, this strategy, led us to leave out documents that were considered important by the experts we called on later in the process; so, we then included them in our selection. This underlines the fact that there is always a part of subjectivity in determining the selection criteria of key documents. Other researchers, by adopting a different selection strategy, may come up with a different list of documents.

Due to time and language constraints, the identification and analysis of policy documents was done by language and assigned to three researchers. There was only limited verification of each researcher's selection, and in a later stage the documents from the German community that were also available in French were examined.

The multiplicity of the policy making structures (federal, federated entities, but also different administrations within the same entitiy) made it difficult to systematically identify all the relevant policy documents. Indeed, they are scattered across different government websites, and are sometimes untraceable. For instance, despite our research efforts, we were unable to locate certain documents pertaining to the e-Health plan for the Brussels region (2017) or the German community's health plan (2015).

Furthermore, because of the broad scope of aims formulated in the policy documents, we sometimes had to interpret the content of certain documents to identify aims: indeed, while some clearly outlined objectives as such, others were not as clear, and we extracted aims from a series of measures, priorities, or other action lines.

Finally, the decision to use the SCIROCCO self-assessment tool to map the objectives formulated in policy documents, guided our focus to the 12 dimensions of IC. Consequently, some IC components which were identified in the Joint Plan are not covered as much in our analysis.

While the focus of analysing the policy documents was to identify aims related to IC, we quickly realised that in some documents, these aims are not always listed explicetly. Moreover, and adding a layer of difficulty, the aims were either hierarchically or logically linked to one another to form the different governments' visions of IC. Despite objectives being organised under different headings ("overall", "strategic" or "operational"), the meaning of those headings was not clearly indicative of their content. We, therefore, decided to list them without these distinctions, since the scope of this study is only limited to their identification in policy documents. In terms of the number of aims identified according to IC dimensions, it may appear that some aims are more developed for some dimensions than others. There is, for instance, a great contrast between the number of aims identified under the "breadth of ambition" dimension, and the aims related to "Evaluation methods" dimension. These numbers do not have any significant bearing on the qualitative approach adopted in this review, and are only due to our methodological approach, and the SCIROCCO maturity model used to identify the aims.

Thus, neither the selection of policy documents nor the identification of aims is completely objective or systematic, but they are guided by the research question and the overall objectives of this report.

Assessment of the obtainment of a subset of the formulated policy aims is provided in the next chapter as a proxy of integrated care maturity. The selection aims to assess was guided by the potential additional information they provided in comparison with the SCIROCCO dimensions

3 MATURITY OF INTEGRATED CARE IN BELGIUM

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Key Findings

ASSESSMENT BY PROFESSIONALS OF THE MATURITY OF INTEGRATED CARE

- **Overall, the 885 professionals participating in the online survey considered integrated care in Belgium to be in a genesis phase, rating the maturity of integrated care rather ‘low’.**

- **Over 70% of the respondents had more than 10 years of work experience. Most (70%) worked in positions involving patient interactions and 44% identified themselves as health care providers (as opposed to policy-makers, researchers, social care, organisation executives, etc.). Although it was a convenience sample, there was a good distribution and varied professional profiles among the three regions.**

- **The SCIROCCO tool was used to evaluate maturity. The assessment tool encompasses 12 dimensions, three of which ('Population approach’, ‘Process coordination’ and ‘Evaluation methods’) were perceived by the stakeholders as slightly more mature—with a median score of 2 on an ordinal scale from 0 to 5—while all the other dimensions received a median score of 1.**

- **Considering the maturity rating of several policy aims identified in the previous chapter, the stakeholders also scored these as ‘low’. The policy aims for which more than 30% of the stakeholders indicated nothing has been done to achieve them, were: “*Ensuring the necessary recruitment of healthcare professionals*”, “*Strengthening a person's ability to self-manage or level of empowerment through new financing models*”,**

“*Simplifying, integrating and improving the efficacy of organisations and structures*" and “*Developing synergies between federal and regional levels*”.

- **No difference in the maturity rating was observed among the different regions for two-thirds of the dimensions. Stakeholders from Flanders assessed '*Readiness to change', 'Structure & Governance*', and *'Capacity building'* as slightly more mature than stakeholders from Wallonia and Brussels, while stakeholders from Wallonia scored *'Digital Infrastructure'* somewhat higher. Caution must be exercised when interpreting these results because we used a convenience sample and results cannot be adjusted by confounding factors such as respondents’ profiles.**
- **Professionals selected *'Finance and funding'* as the top priority to ensure progress is made in the implementation of integrated care in Belgium.**

ASSESSMENT OF THE CARE EXPERIENCE BY PATIENTS

- **In the transition towards more integrated care, the patients' experience is important, as it is also one of the five components of the *Quintuple Aim* put forward by the policy level. To assess the patients' experiences, we used the Patient Assessment of Chronic Illness Care (PACIC) tool. This tool includes 20 items/questions to describe 5 components of the Chronic Care Model (i.e., patient activation, delivery/practice design, goal setting/tailoring, problem solving/contextual, follow-up and/or coordination).**
- **A convenience sample of 1 298 respondents completed online the PACIC questionnaire. Results showed that:**
    - **For 16 items out of the 20, the majority of respondents answered with “never”, “generally not” or “sometimes”.**
    - **More than 60% of the respondents stated that they were, most of the time or always, satisfied with the care organisation.**
    - **The PACIC instrument was originally designed to assess the extent to which patients with chronic illness receive care that aligns with the Chronic Care Model and is not focused on all aspects of integrated care. Therefore, the PACIC has no clear questions on collaboration, coordination between care providers, between sectors (e.g. link between health and social), etc. However, some items related to follow-up are available in PACIC and can be informative to partially assess the patients' experience of integrated care. More than half of the respondents were never contacted after a visit to the doctor to ask again how they were doing nor how the visit to other doctors went. The majority of respondents indicated that “referral to other social or healthcare professionals" never to sometimes happened.**
    - **While the majority of the respondents had the feeling the health care provider took into account their preferences when installing the treatment, the respondents reported seldom the use of treatment plan and goal-oriented care.**
    - **We performed multivariate models to test the impact of gender, age, language, and health-related Quality of Life on the PACIC score. However, only a limited variance could be explained through these models, meaning that a lot of respondents' characteristics, which may drive the PACIC score, were not captured in the questionnaire. Nevertheless, some interesting associations were identified: better PACIC scores were linked to male gender, better Health-Related Quality of Life as measured with the EQ-5D and receiving ’informal and social care’.**
- **This patient survey in a convenience sample should be considered as an explorative study on capturing patient experiences within a broad population sample. While in this study the PACIC questionnaire was selected because it ticked**

off all the predefined criteria (validated, not disease specific, etc.), it might be more appropriate to select or design a survey more tailored to the specific objectives of integrated care as the PACIC was not the ideal tool to capture experiences on collaboration, coordination between care providers, sectors…

3.1 Professionals' assessment of integrated care

3.1.1 Introduction

As it was the intention for this study to have a nationwide view on the perceived maturity of integrated care, and to investigate whether there were geographical disparities, an online survey was designed for stakeholders involved in health policy or the management or provision of health, welfare or social care. This online survey included the twelve dimensions of the SCIROCCO tool (see Introduction) in combination with aims specific to the Belgian context (retrieved from the previous chapter). The survey is used as a basis to start a dialogue with stakeholders which should lead to the identification of potential actions to further implement integrated care in Belgium (see chapter 4).

3.1.2 Methods

An online questionnaire was sent out in a targeted manner across as broad an area as possible (the questionnaire was aimed at professionals and can be consulted in the supplement).

3.1.2.1 Participant Recruitment

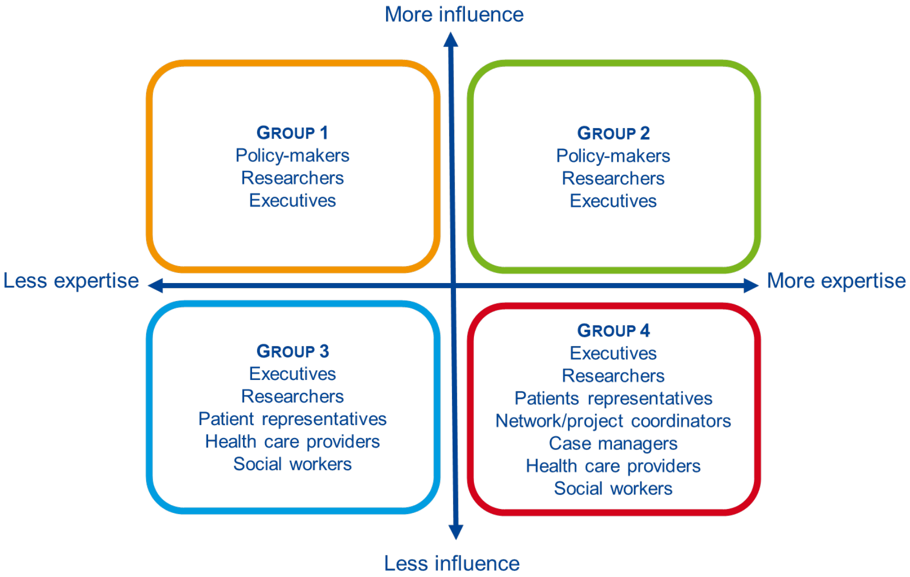
Participants were recruited in three steps using a snowball sampling method:

- First, the stakeholders who were approached for the data collection on policy documents (see chapter 2) were also targeted to complete the questionnaire to assess the maturity of IC in Belgium (snowball sampling). These 20 stakeholders are characterised and chosen for their high expertise in the field of IC and for their level of influence on the organisation of the health system (see Figure 6).
- Second, those 20 stakeholders were asked to provide contact details of potential participants in the survey, resulting in 201 additional contact email addresses.
- Third, those 201 stakeholders were contacted to fill in the survey which requested they also provide contact addresses for “persons with expertise in IC and who should be included in our study". Based on the responses received and additions made by the research team, we obtained a contact list of 1,349 email addresses.

Upon sending the invitation to participate in the survey, recipients were invited to redistribute the survey within their own network to increase the scope of outreach. The following selection criteria were mentioned in the accompanying email:

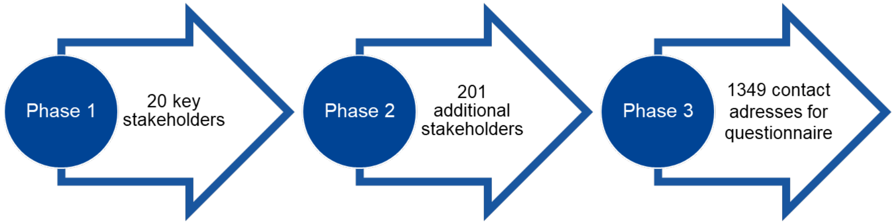
- To be a professional working in Belgium, and involved in the policy-making, management, or provision of health, welfare or social care. The term “professional” in the care or welfare sectors was interpreted broadly to also include patient representatives or informal carers, as well as local authorities involved in community care, decision-makers in the field of health and social care, and researchers.
- To have a self-reported experience in integrated care and some knowledge of the ‘integrated care’ concept.

Figure 6 – Stakeholder mapping matrix for selection of potential participants to the survey



By using this three-step approach, our total sample included 1 349 stakeholders whose email addresses we had obtained, and who had a high level of expertise in the field, and more or less influence on the organisation of the healthcare system (see group 2 and group 4 in Figure 6). The outcome of each step of the participant recruitment process is shown in Figure 7.

Figure 7 – Participant recruitment for the online survey on maturity



3.1.2.2 Developing the professionals' questionnaire

Respondent profile

The survey was aimed at stakeholders who were familiar with the concept of integrated care and who worked in Belgium either on a policy, care management, or care provision level. Therefore, some questions pertaining to respondents' characteristics and work profile were added (age, postal code of the main workplace, professional experience, main work structure, etc.).

Assessing the maturity of integrated care in Belgium

The maturity assessment is based on the original French[103] and Flemish version[104] of the SCIROCCO tool in which the description of the 12 dimensions was adapted to the Belgian context. The SCIROCCO scoring was applied, with scores ranging from 0 (low maturity) to 5 (high maturity) and was supplemented with a category titled "I don't know/I don't understand".

Assessing the policy aims for integrated care

In addition to the standard SCIROCCO tool to assess the maturity of integrated care, the achievement assessment of some policy aims was also surveyed to measure the maturity level of integrated care.

As described in Chapter 2, the identified policy aims were structured according to the 12 SCIROCCO dimensions. Although some policy aims could fit in several SCIROCCO dimensions, the decision was made to categorise them into one SCIROCCO dimension only. Due to the large number of identified policy aims, an *ad hoc* selection was made by choosing only aims that added new elements in comparison with the SCIROCCO dimension and its definition. Note that the policy aims were not formulated exactly the same way as those in Chapter 2, because in the latter, the aims were used to structure the analysis, while for the survey, they were used to provide the respondents with more information.

The policy aims were scored on a five-point scale where 0 represents "nothing is being done to work on this aim" to 4 "this aim is being achieved." It was also possible to indicate "I don't' know / I don't understand this policy aim".

Priority dimension according to professionals to further implement integrated care in Belgium

Finally, participants were asked which dimension they considered to be a priority and what were the obstacles/barriers related to their selected dimension. Participants were also asked to indicate whether they were willing to participate in future discussion groups (next phase of this study; see chapter 4).

Data collection tool

The questionnaire was designed in SurveyMonkey and was available in Dutch and French (see supplement). The translation was done by the research team and cross-checked by native speakers. The survey was then tested to ensure accuracy, readability and proper implementation in SurveyMonkey by persons not involved in drafting the questionnaire. Only the questions on the respondents' profile were mandatory (because it was expected that not all questions on maturity were easy to understand, and the questionnaire was rather long). The questions were listed in randomised order to allow random distribution of missing values due to non-response. The survey was launched on December 15, 2021 and remained open until January 15, 2022. A reminder was sent around a week and a half before the survey closed.

3.1.2.3 Statistical method

Descriptive statistics were used including frequencies and proportions; the median was used as a measure of central tendency and P_{25}-P_{75} as a measure of spread. Due to the nature of the recruitment strategy, it was not possible to check the representativeness of the respondents. Therefore, no statistical test or inference were performed.

A bivariate analysis was performed by region and by professional profile. For the latter, 'professional profile' is defined by professional category (executive function, health care provider, social worker, researcher, policy-maker, network/project coordinator, case manager, patient representatives) and by a categorisation into micro, meso, and macro levels. In the supplemental document, interested readers can find the classification of respondents' professions into these categories.

To describe the respondents' profiles and results of the survey by geographical region, four regions were designated (Flanders, Brussels, Wallonia, and Federal). Although the German Community (Ostbelgien) was not specifically targeted in this survey as there was an ongoing stakeholder consultation in that region already, they were grouped with Wallonia since they are geographically part of the Walloon region. The federal level needed to be included as some stakeholders worked at the federal level and could not really identify as working in another region.

Analyses were performed on respondents with a completed respondent profile and who had assessed at least one SCIROCCO dimension or aim (i.e., had given a score from 0 to 5 or answered 'I do not know').

The data extracted from the SurveyMonkey questionnaire was analysed via the statistical program R version 3.5.1.

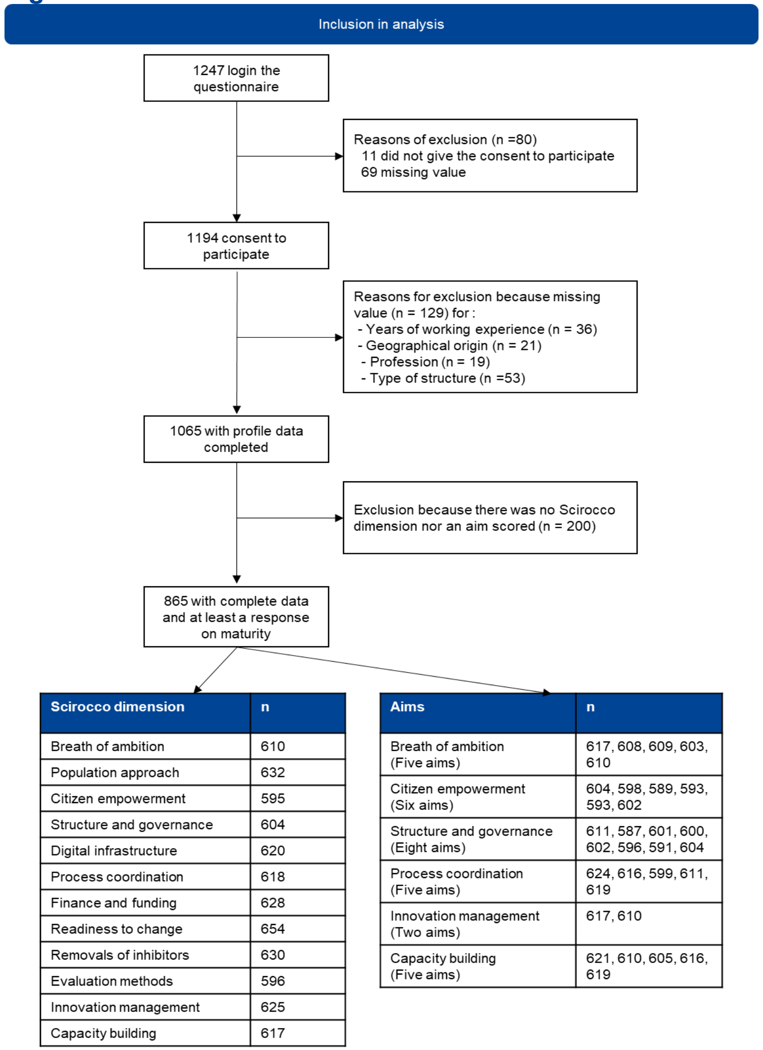
3.1.3 Results

3.1.3.1 Response rate

As shown in Figure 8, 1 274 questionnaires were opened (578 in Dutch and 696 in French). 1 194 respondents gave their consent to participate in the study (11 did not give consent to participate and 69 did not answer the question and therefore did not continue to complete the questionnaire). 129 people did not complete all of the questions on the respondents' characteristics and were therefore not able to evaluate maturity. As the maturity assessment questionnaire is anonymous (except for participants who left their contact details to participate in the next data collection round), we cannot evaluate exactly the number of people implicated in policy document selection and assessment of maturity is unknown. However, at least 2 persons participated in both phases.

Of 1 065 stakeholders with a complete respondent profile, 200 did not score any SCIROCCO dimensions or aims and were thus removed. 865 respondents scored at least one dimension or one aim. In order to randomly allocate the risk of non-response due to questionnaire drop-out, the questions were presented to the participants in a random order. Therefore, the number of answers is fairly similar for all dimensions (approximately 600 answers per SCIROCCO dimension and per aim). A total of 509 people scored all SCIROCCO dimensions, and all aims.

Figure 8 – Data collection flow chart



Scirocco dimension	n
Breath of ambition	610
Population approach	632
Citizen empowerment	595
Structure and governance	604
Digital infrastructure	620
Process coordination	618
Finance and funding	628
Readiness to change	654
Removals of inhibitors	630
Evaluation methods	596
Innovation management	625
Capacity building	617

Aims	n
Breath of ambition (Five aims)	617, 608, 609, 603, 610
Citizen empowerment (Six aims)	604, 598, 589, 593, 593, 602
Structure and governance (Eight aims)	611, 587, 601, 600, 602, 596, 591, 604
Process coordination (Five aims)	624, 616, 599, 611, 619
Innovation management (Two aims)	617, 610
Capacity building (Five aims)	621, 610, 605, 616, 619

Note: the n reported in Figure 8 includes all responses, i.e. scores or a response of 'I do not know/ I don't understand'

3.1.3.2 Description of respondents' characteristics

As shown in Table 15, 865 professionals participated in our study, including 137 working in Brussels, 392 in Flanders, 331 in Wallonia, and 5 at the federal level. Included in the group of professionals from Wallonia, were 20 professionals from Ostbelgien.

Survey participants had extensive work experience with 70% having over 10 years of experience. This proportion is slightly lower in Brussels. Nevertheless, more than 80% of the Brussels respondents had more than 5 years of experience (see Table 15).

The professional profiles varied according to the region; for example, in the Walloon region, fewer respondents held an executive position or a network/project coordinator position. Although most of the respondents identified themselves as healthcare providers in all three regions, the highest proportion was seen in the Walloon region (see Table 15). In Brussels, slightly fewer social care providers participated in the survey in comparison to the other regions. In contrast, researchers/teachers were more represented in Brussels than in other regions (see Table 15).

Most of the respondents (70%) worked at the micro-level (interacting with patients) with a lower proportion in Brussels than in the other regions. In contrast, a larger proportion of respondents from the Brussels region worked at the macro-level (considered, in this case, as the regional level) than in the two other regions. The meso-level (management and support level) was better represented in Flanders. In the supplemental literature, interested readers can find the classification of respondent professions into the categories described above.

Table 15 – Description of respondents' characteristics

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Professional experience					
0-2 years	10	21	19	0	50
3-5 years	13	31	30	0	74
6-10 years	28	44	51	1	124
Longer than 10 years	86	296	231	4	617
Professional categories					
Executive position	42	120	58	0	220
Network/Project Coordinator	10	23	15	0	48
Healthcare providers	48	150	187	0	385
Casemanager	2	5	8	0	15
Social care providers	15	73	54	0	142
Patient / informal carers representative	3	7	2	0	12
Researcher/Teacher	9	5	4	0	18
Policy maker	8	9	3	5	25
Level of governance					
Macro (policy makers)	40	34	32	5	111
Meso (strategic level)	19	81	48	0	148
Micro (operational level)	78	277	251	0	606

Table 16 describes the type of structure in which the respondents worked and reflects the diversity of respondents. Slight differences in the distribution of the different types of structures are observed between regions. Overall, 133 participating stakeholders indicated they were involved in an integrated care pilot project (Integreo). Among those, 22 stakeholders focused their professional activity on an integrated care project.

Table 16 – Description of respondents' characteristics (type of structures / institutions)

Type of structure	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Total (n = 860)
Centre for general welfare (CAW)	6	18	/	24
Centre for the Coordination of Home Help and Care	2	/	25	27
Community Health Center	18	25	71	114
Family and marital planning and counselling centre	1	/	7	8
General or university hospital	12	53	18	83
General Practitioners' Circle	5	/	16	21
Health insurance fund	12	41	9	62
Health Promotion Organisation	4	3	3	10
Health/social relay	1	/	2	3
Home nursing service	6	15	24	45
Children's Homes	/	1	/	1
Independent practice	9	89	40	139
Integrated care project	1	14	7	22
Knowledge institution/University	12	6	5	22
Local multidisciplinary network	4	/	5	8
Local service centre	/	2	/	2
Multidisciplinary palliative care support team	1	2	6	9
Municipality	0	9	0	9
Organisation for mental health care	15	10	30	55
Palliative care network	0	1	3	5
Patient/informal carers associations	2	9	3	15
Mental health care platform	4	5	3	12
Professional association	6	16	19	41
Psychiatric hospital	5	6	6	16
Public institution	9	5	3	17
Public Welfare Centre (CPAS, OCMW)	0	31	15	46

Residential care, day-care centre, short-stay facilities	1	25	6	32
Revalidation centre or revalidation hospital	1	5	5	10

Note: organisations/institutions are listed according to the geographical location of their headquarters.

3.1.3.3 Professionals' assessment of Belgium's maturity in integrated care

Rating of the 12 SCIROCCO dimensions

For half of the dimensions, approximately 10% of respondents were unable to provide an assessment because they did not understand the dimension or felt they were unable to provide an assessment. This proportion was lower for three dimensions, namely *'Readiness to change'*, *'Innovation management'* and '*Citizen empowerment',* with 6%, 7%, and 7% respectively. In contrast, the dimensions with the highest percentage of respondents who did not have a position on those dimensions were *'Finance and Funding'*, *'Evaluation methods'* and *'Population approach'* (15%, 15%, and 16% respectively - see Table 17), meaning that these dimensions seemed more difficult to assess.

On a regional level, the overall proportion of respondents who did not have a position was 9% for Brussels, 10% for Flanders, and 12% for Wallonia (see Table 17). In Brussels and Flanders, it most often pertained to the dimensions *'Population approach'* and *'Evaluation methods'.* In Wallonia, this was mostly the case for *'Finance and Funding'* and *'Removals of inhibitors'*.

The results of the SCIROCCO and aims scoring per professional profile can be found in the supplemental document. The number of respondents per professional category was often very low (< 20 for policy-makers, patient representatives, researchers) which hampers interpretation. However, the analysis at the micro, meso, and macro levels did not show clear tendencies. Overall, the median score was the same for all three levels, with the exception of two dimensions: 'Structure and Governance' for which the meso level scored higher than the micro and macro levels, and 'Digital Infrastructure' for which the macro level had more positive scoring compared to the micro- and meso-level respondents. Details of these descriptive analyses can be found in the supplement.

Table 17 – Description of SCIROCCO dimensions scores, by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Breadth of ambition					
Don't know (n)	14	20	27	0	61
Missing (n)	29	120	106	0	255
Scores (n)	94	252	198	5	549
0 (%)	31.91	10.71	38.89	0.00	24.41
1 (%)	44.68	58.33	14.65	100.00	40.62
2 (%)	13.83	13.49	18.69	0.00	15.30
3 (%)	2.13	5.95	16.16	0.00	8.93
4 (%)	6.38	11.11	7.58	0.00	8.93
5 (%)	1.06	0.40	4.04	0.00	1.82
Population approach					
Don't know (n)	16	44	41	0	101
Missing (n)	26	112	95	0	233
Scores (n)	95	236	195	5	531
0 (%)	16.84	22.88	16.92	20.00	19.59
1 (%)	23.16	16.53	19.49	0.00	18.64
2 (%)	32.63	34.75	25.64	60.00	31.26
3 (%)	20.00	13.14	24.10	20.00	18.46
4 (%)	7.37	12.29	12.31	0.00	11.30
5 (%)	0.00	0.42	1.54	0.00	0.75
Citizen Empowerment					
Don't know (n)	8	17	19	0	44
Missing (n)	40	107	123	0	270
Scores (n)	89	268	189	5	551
0 (%)	10.11	2.61	10.58	0.00	6.53
1 (%)	53.93	51.49	41.80	40.00	48.46
2 (%)	28.09	20.15	33.33	20.00	25.95
3 (%)	4.49	19.40	9.52	20.00	13.61
4 (%)	3.37	4.85	3.70	20.00	4.36
5 (%)	0.00	1.49	1.06	0.00	1.09

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Structure & Governance					
Don't know (n)	7	20	29	0	56
Missing (n)	33	120	108	0	261
Scores (n)	97	252	194	5	548
0 (%)	31.96	23.81	30.41	20.00	27.55
1 (%)	23.71	23.41	27.32	40.00	25
2 (%)	28.87	30.95	31.96	40.00	31.02
3 (%)	11.34	13.89	6.70	0.00	10.77
4 (%)	2.06	7.14	2.58	0.00	4.56
5 (%)	2.06	0.79	1.03	0.00	1.09
Digital infrastructure					
Don't know (n)	8	29	29	0	66
Missing (n)	33	106	106	0	245
Scores (n)	96	257	196	5	554
0 (%)	9.38	7.00	11.22	0.00	8.84
1 (%)	46.88	54.86	34.69	40.00	46.21
2 (%)	18.75	15.56	13.78	60.00	15.88
3 (%)	18.75	12.06	26.02	0.00	18.05
4 (%)	5.21	10.51	11.73	0.00	9.93
5 (%)	1.04	0.00	2.55	0.00	1.08
Process coordination					
Don't know (n)	7	38	21	0	66
Missing (n)	36	108	103	0	247
Scores (n)	94	246	207	5	552
0 (%)	10.64	10.16	14.01	0.00	11.59
1 (%)	36.17	28.86	28.50	0.00	29.71
2 (%)	41.49	44.31	29.47	80.00	38.59
3 (%)	9.57	11.79	18.84	20.00	14.13
4 (%)	0.00	4.47	7.73	0.00	4.89
5 (%)	2.13	0.41	1.45	0.00	1.09

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Finance & Funding					
Don't know (n)	12	34	47	-	93
Missing (n)	29	113	95	-	237
Scores (n)	96	245	189	5	535
0 (%)	6.25	24.08	14.29	-	17.20
1 (%)	73.96	57.55	54.50	80.00	59.63
2 (%)	12.50	7.76	15.87	-	11.40
3 (%)	2.08	2.86	7.41	-	4.30
4 (%)	1.04	4.49	3.70	20.00	3.74
5 (%)	4.17	3.27	4.23	-	3.74
Readiness to change					
Don't know (n)	2	17	20	-	39
Missing (n)	33	95	83	-	211
Scores (n)	102	280	228	5	615
0 (%)	6.86	5.36	3.95	-	5.04
1 (%)	49.02	43.57	52.63	40.00	47.80
2 (%)	38.24	36.43	32.89	20.00	35.28
3 (%)	3.92	10.71	6.58	40.00	8.29
4 (%)	0.98	2.50	2.63	-	2.28
5 (%)	0.98	1.43	1.32	-	1.30
Removals of inhibitors					
Don't know (n)	8	23	36	-	67
Missing (n)	31	111	93	-	235
Scores (n)	98	258	202	5	563
0 (%)	10.20	7.75	11.39	-	9.41
1 (%)	74.49	78.68	65.35	100.00	73.36
2 (%)	7.14	7.36	8.42	-	7.64
3 (%)	7.14	4.65	11.39	-	7.46
4 (%)	1.02	1.55	2.48	-	1.78
5 (%)	-	-	0.99	-	0.36

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Evaluation methods					
Don't know (n)	14	49	28	-	91
Missing (n)	39	102	128	-	269
Scores (n)	84	241	175	5	505
0 (%)	33.33	34.44	21.71	20.00	29.70
1 (%)	16.67	13.28	15.43	-	14.46
2 (%)	32.14	28.22	24.00	60.00	27.72
3 (%)	14.29	18.67	23.43	20.00	19.60
4 (%)	3.57	4.56	6.86	-	5.15
5 (%)	-	0.83	8.57	-	3.37
Innovation management					
Don't know (n)	6	18	19	-	43
Missing (n)	30	113	97	-	240
Scores (n)	101	261	215	5	582
0 (%)	10.89	7.28	11.16	-	9.28
1 (%)	55.45	51.72	42.79	20.00	48.80
2 (%)	28.71	27.97	35.35	40.00	30.93
3 (%)	3.96	9.58	8.84	40.00	8.59
4 (%)	0.99	2.68	1.40	-	1.89
5 (%)	-	0.77	0.47	-	0.52
Capacity building					
Don't know (n)	12	23	17	-	52
Missing (n)	34	114	100	-	248
Scores (n)	91	255	214	5	565
0 (%)	8.79	7.84	16.36	-	11.15
1 (%)	50.55	32.55	47.20	40.00	41.06
2 (%)	20.88	27.45	14.49	-	21.24
3 (%)	15.38	28.63	17.76	60.00	22.65
4 (%)	1.10	2.75	1.40	-	1.95
5 (%)	3.30	0.78	2.80	-	1.95

SCIROCCO maturity assessment

An overview of the maturity rated by the stakeholders can be seen in Figure 9 and Figure 10 for the total Belgian sample.

Figure 9 – Description of SCIROCCO dimension scores for the total Belgian sample (spider diagram)

Note: the blue line represents the median score for each dimension, and the orange dots show the importance of each response category (the size of the circle is proportional to the number of responses in each category).

The median score for 9 of the 12 dimensions was 1 (on a scale of 0 to 5), indicating that the stakeholders estimated that:

- Citizens or their families may need to act as integrators of service in an unpredictable way, meaning that there is no integration within the same care level yet (e.g., integration of all the primary care actors) [breadth of ambition];
- Citizen empowerment is recognised as an important part of integrated care provision, but effective policies to support empowerment are still being developed [citizen empowerment];
- The need for structural and governance change is recognised [structure and governance];
- The need for a digital infrastructure is recognised but there is no strategy and/or plan on how to deploy and standardise digital infrastructure to support integrated care [digital infrastructure];
- Funding for more integrated care is available but mainly for pilot projects and testing [finance and funding];
- There is a compelling need to re-design the existing system of care to provide a more integrated set of services, but no clear vision or strategic plan is available [readiness to change];
- Inhibitors of integrated care are known but no systematic approach is in place to manage them [removals of inhibitors];
- Innovation to improve the delivery of care is encouraged but there is no overall plan in place [innovation management];
- And some approaches to build capacity for integrated care services are in place [capacity building].

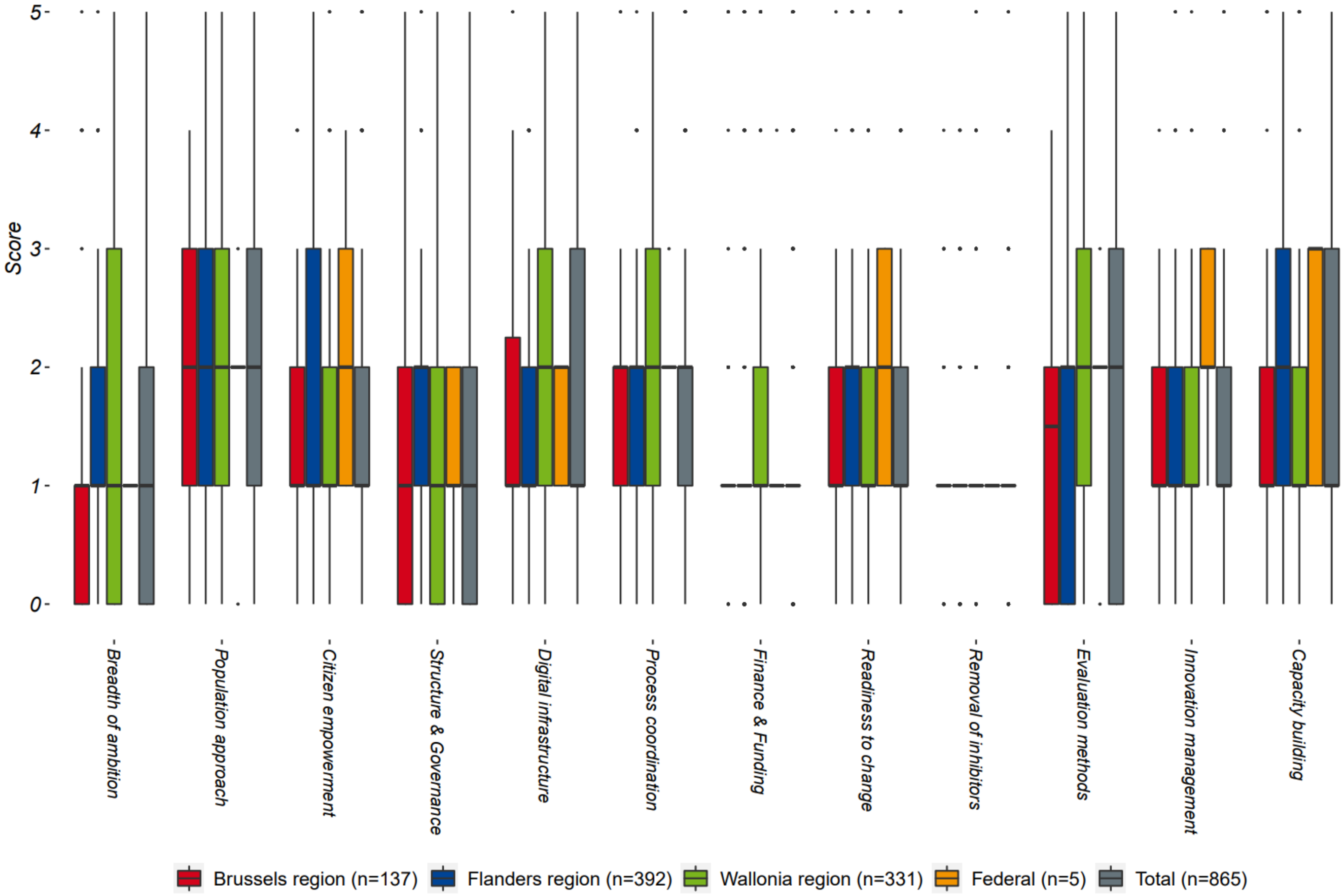
The last three dimensions received slightly higher scores with a median score of 2, meaning that stakeholders estimated that:

- Risk stratification approach is used in certain projects on an experimental basis [population approach];
- Some standardised coordinated care processes are underway; guidelines are observed, some initiatives and pathways are formally described, but no systematic approach is planned [process coordination];
- And an evaluation of integrated care services exists, but not as a part of a systematic approach [evaluation methods].

As shown in Figure 10, the Interquartile range (IQR) for the dimensions '*Finance and Funding'* and '*Removal of Inhibitors'* is zero (for most regions and the total Belgian sample) indicating that there is a certain level of consensus among the stakeholders around the idea that the funding for integrated care is still in a pilot phase and the inhibitors of integrated care are known but not addressed. In contrast, the dimension *'Evaluation methods'* showed a large IQR indicating that the stakeholders' position regarding this issue is more heterogeneous than for other dimensions.

The regional overview is illustrated in Figure 10 (spider diagrams per region can be consulted in the supplemental document). No obvious regional difference in the maturity rating was observed in two-thirds of the dimensions. Stakeholders from Flanders assessed *'Readiness to change', 'Structure & Governance'*, and *'Capacity building*' as slightly more mature than stakeholders from Wallonia and Brussels, while stakeholders from Wallonia scored *'Digital infrastructure*' somewhat higher. These figures should be interpreted with caution because the results were not adjusted by confounding factors such as respondent profiles.

Figure 10 – Description of SCIROCCO dimensions scores for the total sample (box plot)



3.1.3.4 Professionals' assessment of the achievement of integrated care policy aims

In addition to the twelve SCIROCCO dimensions, policy aims included in the policy documents were scored, as they relate to six dimensions. The following paragraphs describe the results, by dimension and by region.

Responses regarding the aims generally showed a similar result as for the SCIROCCO dimensions. Most of the time the aim scored a 1 or 2 (out of a maximum of 4). Comparing the response pattern between the SCIROCCO dimensions and the aims is not possible since they are assessed on different scales.

Five aims are attached to the ***'Breadth of ambition'*** dimension (see Table 18). For most aims, there is little regional difference in the scores, except for the first aim, "*strengthening primary care*", and the second aim "*strengthening the relationship between individual health, wellbeing and community dynamics*", for which the proportion of participants who scored 0 is larger in the Walloon sample.

Six aims are attached to the dimension ***'Citizen empowerment'*** (see Table 19). The distribution of scores for these different aims follows the same trend in three regions, with only minor differences depending on the aim. The lowest scoring aim in all three regional samples is aim 5, "*strengthening a person's self-management or empowering through new financing models*".

Eight aims are attached to the ***'Structure and Governance'*** dimension (see Table 20). In general, they are slightly better rated by the Flemish sample. This is specifically the case for the following two aims: "*defining geographical areas in which collaboration between organisations and actors is developed and which enable structuring of the care services*" and "*stimulating the collaboration between care and welfare institutions and strengthening the networks between local actors and between different care levels*". There is no regional difference for the aim "developing synergies between federal and regional levels" where the distributions are almost identical in all regions.

Five aims are attached to the ***'Process coordination'*** dimension (see Table 21). The distribution of scores for these five aims are scattered in the Walloon sample. Respondents from Brussels scored the lowest on all five aims. The lowest-scoring aim is "*developing the case manager function*".

The distribution of the two aims attached to the *'**Innovation management**'* dimension is very similar across the different regional samples (see Table 22).

Finally, five aims are attached to the '***Capacity building'*** dimension (see Table 23). The fifth aim, "ensuring the *necessary recruitment of health care professionals*", is not rated as highly across all regions, with 34% of the total sample giving it a score of 0 (i.e., nothing is being done).

Overall, more than 30% of the respondents indicated that nothing is being done to achieve the following policy aims (score 0 on a scale from 0 to 4): "*Ensuring the necessary recruitment of health care professionals*", "*Strengthening a person's self-management or empowering through new financing models*", *"Simplifying, integrating and improving the efficacy of organisations and structures"* and "Developing synergies between federal *and regional levels*".

Table 18 – Description of aims linked to the 'Breadth of ambition' dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 1: Strengthening primary care					
Don't know/understand (n)	1	8	9	-	18
Missing (n)	28	118	102	-	248
Scores (n)	108	266	220	5	599
0 (%)	21.30	9.02	31.36	-	19.37
1 (%)	36.11	34.21	33.64	-	34.06
2 (%)	25.00	30.08	19.55	60.00	25.54
3 (%)	12.96	23.68	12.27	40.00	17.70
4 (%)	4.63	3.01	3.18	-	3.34
Aim 2: Strenghtening the relationship between individual health, wellbeing and community dynamics					
Don't know/understand (n)	3	6	7	-	16
Missing (n)	30	123	104	-	257
Scores (n)	104	263	220	5	592
0 (%)	15.38	7.98	22.73	20.00	14.86
1 (%)	46.15	35.74	32.27	20.00	36.15
2 (%)	23.08	39.16	29.55	40.00	32.77
3 (%)	15.38	15.21	12.27	20.00	14.19
4 (%)	-	1.90	3.18	-	2.03
Aim 3: Improving the continuity of care					
Don't know/understand (n)	5	3	8	-	16
Missing (n)	32	120	104	-	256
Scores (n)	100	269	219	5	593
0 (%)	14.00	7.43	18.72	-	12.65
1 (%)	41.00	34.94	31.05	20.00	34.40
2 (%)	32.00	39.03	32.88	60.00	35.75
3 (%)	11.00	16.36	13.24	-	14.17
4 (%)	2.00	2.23	4.11	20.00	3.04

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 4: Developing a life course approach					
Don't know/understand (n)	4	10	6	-	20
Missing (n)	30	126	106	-	262
Scores (n)	103	256	219	5	583
0 (%)	28.16	19.92	25.11	20.00	23.33
1 (%)	46.60	46.48	39.27	40.00	43.74
2 (%)	17.48	25.00	21.00	40.00	22.30
3 (%)	7.77	7.81	12.79	-	9.61
4 (%)	-	0.78	1.83	-	1.03
Aim 5: Improving the person's perceived quality of life					
Don't know/understand (n)	3	13	21	-	37
Missing (n)	30	120	105	-	255
Scores (n)	104	259	205	5	573
0 (%)	18.27	10.42	15.61	-	13.61
1 (%)	49.04	33.98	36.10	40.00	37.52
2 (%)	24.04	37.84	31.22	20.00	32.81
3 (%)	6.73	15.83	14.15	40.00	13.79
4 (%)	1.92	1.93	2.93	-	2.27

Table 19 – Description of aims linked to the 'Citizen empowerment' dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
	Aim 1: Strengthening the person's self-management or empowering through new organisation models within care and welfare				
Don't know/understand (n)	5	11	4	0	20
Missing (n)	39	106	116	0	261
Scores (n)	93	275	211	5	584
0 (%)	18.28	10.18	10.43	0.00	11.47
1 (%)	47.31	30.18	35.07	40.00	34.76
2 (%)	24.73	33.09	28.91	60.00	30.48
3 (%)	6.45	22.55	16.11	0.00	17.47
4 (%)	3.23	4.00	9.48	0.00	5.82
	Aim 2: Strengthening the person's self-management or empowering through access to one's own electronic medical record				
Don't know/understand (n)	4	11	9	0	24
Missing (n)	39	109	119	0	267
Scores (n)	94	272	203	5	574
0 (%)	8.51	9.19	16.75	0.00	11.67
1 (%)	36.17	25.37	39.41	20.00	32.06
2 (%)	31.91	32.72	21.18	60.00	28.75
3 (%)	15.96	24.63	15.76	20.00	20.03
4 (%)	7.45	8.09	6.90	0.00	7.49
	Aim 3: Strengthen the person's self-management or empowering by developing specific tools that the person can also access and/or add to				
Don't know/understand (n)	5	11	7	0	23
Missing (n)	39	115	122	0	276
Scores (n)	93	266	202	5	566
0 (%)	17.20	12.03	17.33	0.00	14.66
1 (%)	47.31	34.21	35.15	60.00	36.93
2 (%)	26.88	34.96	30.69	40.00	32.16
3 (%)	6.45	16.54	12.38	0.00	13.25
4 (%)	2.15	2.26	4.46	0.00	3.00

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
	Aim 4: Strengthening the person's self-management or empowering them by recognising him as a partner in the care process and the care team				
Don't know/understand (n)	5	7	4	0	16
Missing (n)	42	112	118	0	272
Scores (n)	90	273	209	5	577
0 (%)	14.44	7.69	10.05	20.00	9.71
1 (%)	43.33	32.97	31.58	40.00	34.14
2 (%)	24.44	26.37	25.36	20.00	25.65
3 (%)	11.11	27.84	17.22	20.00	21.32
4 (%)	6.67	5.13	15.79	0.00	9.19
	Aim 5: Strengthening the person's self-management or empowering through new financing models				
Don't know/understand (n)	11	27	33	0	71
Missing (n)	41	112	119	0	272
Scores (n)	85	253	179	5	522
0 (%)	34.12	25.69	41.90	20.00	32.57
1 (%)	41.18	42.29	37.43	60.00	40.61
2 (%)	15.29	20.55	13.41	20.00	17.24
3 (%)	5.88	9.09	5.59	0.00	7.28
4 (%)	3.53	2.37	1.68	0.00	2.30
	Aim 6: Promoting patient participation by including patients (or patient organisations) in advisory and decision-making bodies and healthcare institutions				
Don't know/understand (n)	6	12	24	0	42
Missing (n)	40	105	118	0	263
Scores (n)	91	275	189	5	560
0 (%)	19.78	9.82	23.28	0.00	15.89
1 (%)	39.56	34.55	37.57	40.00	36.43
2 (%)	21.98	28.36	20.63	40.00	24.82
3 (%)	16.48	19.27	14.29	20.00	17.14
4 (%)	2.20	8.00	4.23	0.00	5.71

Table 20 – Description of aims linked to the ‘Structure and Governance’ dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 1: Developing strategies to promote multidisciplinary teamwork					
Don't know/understand (n)	5	11	5	0	21
Missing (n)	36	104	101	0	241
Scores (n)	96	277	225	5	603
0 (%)	9,38	8,30	17,33	0,00	11,77
1 (%)	43,75	32,85	21,33	0,00	30,02
2 (%)	32,29	35,38	26,67	80,00	32,01
3 (%)	11,46	21,30	24,00	20,00	20,73
4 (%)	3,12	2,17	10,67	0,00	5,47
Aim 2: Developing functions responsible for tasks requiring specific skills					
Don't know/understand (n)	8	16	11	0	35
Missing (n)	37	107	105	0	249
Scores (n)	92	269	215	5	581
0 (%)	16,30	7,43	13,02	0,00	10,84
1 (%)	44,57	35,69	29,30	20,00	34,60
2 (%)	26,09	32,34	23,26	40,00	28,06
3 (%)	9,78	18,96	20,93	40,00	18,42
4 (%)	3,26	5,58	13,49	0,00	8,09
Aim 3: Developing the case manager function					
Don't know/understand (n)	8	37	38	0	83
Missing (n)	41	119	106	0	266
Scores (n)	88	236	187	5	516
0 (%)	20,45	20,34	20,86	20,00	20,54
1 (%)	40,91	39,41	31,55	40,00	36,82
2 (%)	29,55	22,88	28,34	40,00	26,16
3 (%)	5,68	12,29	13,37	0,00	11,43
4 (%)	3,41	5,08	5,88	0,00	5,04

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 4: Developing opportunities for meetings (physical and digital) - meetings within a care team to coordinate the roles and working methods of the various actors and to plan the care process					
Don't know/understand (n)	7	14	12	0	33
Missing (n)	37	113	104	0	254
Scores (n)	93	265	215	5	578
0 (%)	13,98	6,79	14,88	0,00	10,90
1 (%)	36,56	28,30	24,65	20,00	28,20
2 (%)	26,88	31,70	24,65	60,00	28,55
3 (%)	10,75	27,17	20,93	20,00	22,15
4 (%)	11,83	6,04	14,88	0,00	10,21
Aim 5: Developing processes that enable cooperation between levels of care and/or between different sectors					
Don't know/understand (n)	6	20	9	0	35
Missing (n)	37	108	101	0	246
Scores (n)	94	264	221	5	584
0 (%)	14,89	8,71	19,00	0,00	13,53
1 (%)	47,87	32,58	27,60	60,00	33,39
2 (%)	25,53	36,74	25,79	20,00	30,65
3 (%)	8,51	17,42	20,81	20,00	17,29
4 (%)	3,19	4,55	6,79	0,00	5,14

Table 21 – Description of aims linked to the ‘Process coordination’ dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
	Aim 1: Developing strategies to promote multidisciplinary teamwork				
Don't know/understand (n)	5	11	5	0	21
Missing (n)	36	104	101	0	241
Scores (n)	96	277	225	5	603
0 (%)	9.38	8.30	17.33	0.00	11.77
1 (%)	43.75	32.85	21.33	0.00	30.02
2 (%)	32.29	35.38	26.67	80.00	32.01
3 (%)	11.46	21.30	24.00	20.00	20.73
4 (%)	3.12	2.17	10.67	0.00	5.47
	Aim 2: Developing functions responsible for tasks requiring specific skills				
Don't know/understand (n)	8	16	11	0	35
Missing (n)	37	107	105	0	249
Scores (n)	92	269	215	5	581
0 (%)	16.30	7.43	13.02	0.00	10.84
1 (%)	44.57	35.69	29.30	20.00	34.60
2 (%)	26.09	32.34	23.26	40.00	28.06
3 (%)	9.78	18.96	20.93	40.00	18.42
4 (%)	3.26	5.58	13.49	0.00	8.09
	Aim 3: Developing the case manager function				
Don't know/understand (n)	8	37	38	0	83
Missing (n)	41	119	106	0	266
Scores (n)	88	236	187	5	516
0 (%)	20.45	20.34	20.86	20.00	20.54
1 (%)	40.91	39.41	31.55	40.00	36.82
2 (%)	29.55	22.88	28.34	40.00	26.16
3 (%)	5.68	12.29	13.37	0.00	11.43
4 (%)	3.41	5.08	5.88	0.00	5.04

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
	Aim 4: Developing opportunities for meetings (physical and digital) - meetings within a care team to coordinate the roles and working methods of the various actors and to plan the care process				
Don't know/understand (n)	7	14	12	0	33
Missing (n)	37	113	104	0	254
Scores (n)	93	265	215	5	578
0 (%)	13.98	6.79	14.88	0.00	10.90
1 (%)	36.56	28.30	24.65	20.00	28.20
2 (%)	26.88	31.70	24.65	60.00	28.55
3 (%)	10.75	27.17	20.93	20.00	22.15
4 (%)	11.83	6.04	14.88	0.00	10.21
	Aim 5: Developing processes that enable cooperation between levels of care and/or between different sectors				
Don't know/understand (n)	6	20	9	0	35
Missing (n)	37	108	101	0	246
Scores (n)	94	264	221	5	584
0 (%)	14.89	8.71	19.00	0.00	13.53
1 (%)	47.87	32.58	27.60	60.00	33.39
2 (%)	25.53	36.74	25.79	20.00	30.65
3 (%)	8.51	17.42	20.81	20.00	17.29
4 (%)	3.19	4.55	6.79	0.00	5.14

Table 22 – Description of aims linked to the ‘Innovation management’ dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 1: Encouraging experimentation with new care models					
Don't know/understand (n)	8	18	21	0	47
Missing (n)	33	119	96	0	248
Scores (n)	96	255	214	5	570
0 (%)	15,62	10,20	19,63	0,00	14,56
1 (%)	28,12	32,16	25,23	20,00	28,77
2 (%)	32,29	32,94	31,31	60,00	32,46
3 (%)	20,83	22,35	19,16	20,00	20,88
4 (%)	3,12	2,35	4,67	0,00	3,33
Aim 2: Supporting the development of digital technologies to support care innovation					
Don't know/understand (n)	5	16	16	0	37
Missing (n)	35	120	99	1	255
Scores (n)	97	256	216	4	573
0 (%)	15,46	15,62	20,37	0,00	17,28
1 (%)	44,33	34,77	38,89	75,00	38,22
2 (%)	27,84	31,64	24,54	0,00	28,10
3 (%)	11,34	15,23	12,50	25,00	13,61
4 (%)	1,03	2,73	3,70	0,00	2,79

Table 23 – Description of aims linked to the ‘Capacity building’ dimension by region (bar plot)

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 1: Strengthening the basic education of health professionals by including topics such as empowerment, multidisciplinary collaboration and quality improvement					
Don't know/understand (n)	9	19	5	-	33
Missing (n)	33	112	99	-	244
Scores (n)	95	261	227	5	588
0 (%)	14.74	12.26	19.82	-	15.48
1 (%)	43.16	33.72	34.80	40.00	35.71
2 (%)	26.32	27.59	23.35	20.00	25.68
3 (%)	11.58	24.14	15.86	40.00	19.05
4 (%)	4.21	2.30	6.17	-	4.08
Aim 2: Developing and providing continuing education on integrated care					
Don't know/understand (n)	8	13	7	-	28
Missing (n)	37	115	103	-	255
Scores (n)	92	264	221	5	582
0 (%)	17.39	20.45	22.62	20.00	20.79
1 (%)	48.91	34.85	35.29	40.00	37.29
2 (%)	20.65	25.76	26.24	20.00	25.09
3 (%)	11.96	14.77	10.41	20.00	12.71
4 (%)	1.09	4.17	5.43	-	4.12
Aim 3: Supporting knowledge sharing					
Don't know/understand (n)	6	12	5	-	23
Missing (n)	34	120	105	1	260
Scores (n)	97	260	221	4	582
0 (%)	11.34	11.92	17.19	-	13.75
1 (%)	32.99	36.54	29.41	-	32.99
2 (%)	37.11	28.85	30.32	50.00	30.93
3 (%)	13.40	20.38	17.19	50.00	18.21
4 (%)	5.15	2.31	5.88	-	4.12

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Aim 4: Developing research on integrated care					
Don't know/understand (n)	8	30	17	-	55
Missing (n)	33	114	102	-	249
Scores (n)	96	248	212	5	561
0 (%)	15.62	18.15	19.34	-	18.00
1 (%)	38.54	33.06	39.62	60.00	36.72
2 (%)	33.33	31.45	26.89	20.00	29.95
3 (%)	10.42	16.13	11.32	20.00	13.37
4 (%)	2.08	1.21	2.83	-	1.96
Aim 5: Ensuring the necessary recruitment within the healthcare professions					
Don't know/understand (n)	11	31	9	-	51
Missing (n)	34	112	100	-	246
Scores (n)	92	249	222	5	568
0 (%)	34.78	28.51	40.99	20.00	34.33
1 (%)	45.65	39.36	30.18	60.00	36.97
2 (%)	8.70	20.88	17.12	20.00	17.43
3 (%)	6.52	9.64	9.01	-	8.80
4 (%)	4.35	1.61	2.70	-	2.46

3.1.3.5 Professionals' SCIROCCO priority dimension

Although there were many missing answers for this question in the survey (i.e., 38.8%), most of the respondents indicated that the dimension 'Finance and Funding' is a priority (Table 24). This is not surprising given the low rated maturity for this SCIROCCO dimension (median score = 1) and the apparent consensus of this score (i.e., there is little dispersion in the scores for this dimension – IQR=0).

The second and third top-rated priority dimensions (ranked by the number of respondents) are not the same across regions (see Table 24).

- For Brussels the top 3 priority dimensions are (1) Finance and Funding, (2) Structure and Governance, and (3) Capacity building.
- For Flanders, the top 3 priority dimensions are (1) Finance and Funding, (2) Digital infrastructure, and (3) Process coordination.
- For Wallonia, the top 3 priority dimensions are (1) Finance and Funding, (2) Process coordination, and (3) Citizen empowerment.
- Finally, for the Federal level, the top 3 priority dimensions are (1) Finance and Funding, (2) Population approach, and (3) Process coordination.

Table 24 – Description of priority dimensions by region

	Brussels (n = 137)	Flanders (n = 392)	Wallonia (n = 331)	Federal (n = 5)	Total (n = 865)
Breadth of ambition (%)	2.92	1.53	3.93	-	2.66
Capacity building (%)	7.30	1.79	2.11	-	2.77
Citizen empowerment (%)	6.57	6.38	6.95	-	6.59
Digital infrastructure (%)	2.92	8.42	2.42	20.00	5.32
Evaluation methods (%)	0.73	-	-	-	0.12
Finance & Funding (%)	11.68	15.56	12.08	-	13.53
Innovation management (%)	-	1.02	-	20.00	0.58
Population approach (%)	7.30	5.10	4.23	20.00	5.20
Process coordination (%)	7.30	7.40	10.27	-	8.44
Readiness to change (%)	6.57	5.87	6.34	-	6.13
Removal of inhibitors (%)	2.92	2.55	4.23	-	3.24
Structure & Governance (%)	11.68	5.61	5.44	20.00	6.59
NA (%)	32.12	38.78	41.99	20.00	38.84

Percentage of respondents who identified the dimension as a priority; NA: not applicable are the missing answers

3.2 Patients' experience of integrated care

3.2.1 Introduction

One of the main objectives of integrated care is to enable the transition from a care organisation designed for the management of acute episodes to the provision of person-centred care throughout the live cycle. This transition must support the achievement of the 'Quintuple Aim' (see introduction) that includes the improvement of patient experience and outcomes (see Figure 1). In this section, we propose to assess how the patients experienced their care in the current care organisation through a self-reporting tool as they are best placed to judge whether their care is effective, smooth, or seamless. Assessing the patient's experience (PREMS – patient-reported experience measures), as well as patient's reported outcomes (PROMS – patient-reported outcomes measures) gains in importance both internationally and nationally.[120] This is illustrated by the numerous initiatives such as the reporting on the patient's experience about their hospital stay[121, 122], mental care[123], and more recently the OECD PaRIS initiative (Patient-Reported Indicator Surveys) in primary care.[124] The PaRIS patient questionnaire aims to capture the health care experiences and healthcare outcomes of patients aged 45 and over, suffering from one or more chronic conditions and receiving primary care. Anno 2022 the survey is piloted in some countries, one of which is Belgium. Moreover, as person-centredness is considered a key element of high-quality care, the assessment of patient experience is recommended when evaluating integrated care.[125]

With this study, we wanted to have a snapshot of the care experience as perceived by the patients. Although there was the risk of overlapping initiatives, time constraints as well as the objective to target the patient survey very broadly (nationally, and not restricted to a specific health care setting), made it necessary to set up a specific online survey for our study in which patients were asked to rate their quality of life and the extent they experienced 'integrated care'.

3.2.2 Method

3.2.2.1 Development of the patient – questionnaire

Data collection regarding patients' care needs and demographic characteristics

To keep the questionnaire as short as possible, we limited the data collection on demographic characteristics to language, gender, age categories, and postal code. Postal codes were used to allow analysis at different geographical levels.

To evaluate the participants' care needs and to avoid any possibility to lift the participants' anonymity, we did not ask information on specific pathologies, but asked whether they had 1 chronic condition or multiple, and what type of care providers (healthcare, social and/or informal) were consulted in the last 12 months.

Selection criteria to choose an instrument to assess the patient's health-related quality of life and experience

A search for existing instruments was undertaken. Some requirements for selecting the instruments were predefined:

- demonstrated validity and reliability
- can be used as a self-administered written/online questionnaire (no interviews)
- leads to a numerical (total) score
- is short (less than 30 questions)
- is applicable to at least patients with a chronic somatic condition, and preferably also to other patient categories in need for integrated care
- is not disease-specific
- is available in Dutch, French, and German
- has preferably been used previously in Belgium

Based on these criteria and after consultation of patient representatives (LUSS and VPP) to check the user-friendly aspect of the tools, we opted for

EQ-5D-5L (including EQ-VAS) for the evaluation of patient's health-related quality of life (HRQoL) and Patient Assessment of Chronic Illness Care (PACIC) as a proxy for assessing the experience of integrated care. The use of PACIC was also recommended in previous research on integrated care.[125] [126]More details on this exploratory phase were available upon request to the authors of the report.

Instrument for assessing the experience of integrated care - PACIC

The main outcome of interest is the experience of care. The PACIC instrument[127] has been created to assess whether provided care is congruent with the Chronic Care Model [128, 129], according to patients. The PACIC is a 20 item-questionnaire comprising five subscales: patient activation, delivery-system/ practice design, goal setting/tailoring, problem-solving/contextual, and follow-up/coordination. The five-point response scale ranges from ‘never’ to ‘always’ with higher scores indicating a more frequent presence of the respective aspect of chronic care.

The PACIC has been used frequently and in patients with a variety of chronic conditions, and has been used in Belgium.[130-132]

While the PACIC instrument has been subject to different alterations (e.g. a short version PACIC 11 [133-135], surveying bereaved persons on the decedent’s last year of life (PACIC S9-Proxy)[136], changing the recall period[137, 138]), time constraints made it not possible to compile and test an adapted version. Therefore, we did not adapt the 20 questions of the original PACIC, nor did we include extra questions. Based on the advice of the Ethical Committee (see below), we inserted an extra response category ‘not applicable - not able to answer’ leaving the patient an option not to respond when deemed not appropriate. Moreover, we extended the recall period from 6 months to 12 months to be more consistent with the other questions in the survey. The presentation of the PACIC results were structured by subscale categories. However, the total scores by subscale were not calculated and discussed because the evidence showed limitations in the validity and reliability of these subscores.[139-141]

Instrument for assessing the patient’s health-related quality of life – EQ-5D-5L

Peer reviewed literature reports links between the Health-Related Quality of Live (HRQoL) and patients' experience. [142] [143] Therefore, we did not use HRQoL as an outcome measure of an integrated care intervention the but as a covariate when exploring the patients' experience of care. The HRQoL is assessed through EQ-5D-5L. This tool was developed in 2009 by the Euroqol group,[144] asks the patient to score five dimensions (5D): mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Each dimension has five levels (5L): no problems, slight problems, moderate problems, severe problems, and extreme problems. The patient is asked to indicate his/her health state on day of the survey by associating the most appropriate level to the statement in each of the five dimensions. Based on the EQ-5D-5L, the EQ profiles (frequency of level for each dimension), the EQ index score (calculation and interpretation of the score is explained in the statistical analyses)[145] were used to describe the patients' quality of life. In addition, EQ-VAS was asked to the patients to complete the assessment of the quality of live. EQ-VAS is a visual analogue scale scoring from 0 (worst imaginable health state) to 100 (best imaginable health state) asking participants to score their health on the day that they complete the questionnaire. The license agreement has been obtained from EuroQol to use the EQ-5D-5L and EQ-VAS.

Data collection tool

An online survey had been developed. The main rationale to limit to an online survey only, is due to the time constraints of this project. The whole questionnaire is a self-administrated survey lasting around 10 minutes. The questionnaire is not disease-specific and is offered in three languages (French, German, and Dutch). The software Askia was used to collect the data. This software is ISO and General Data Protection Regulation (GDPR) compliant, allowing de-identification and encryption and allows secure communication and file exchange. It allows patients to report through web and mobile applications, thereby increasing response rates. The survey was tested before launch by the subcontractor (Hict - Profacts) and by KCE. The online survey could be filled in from 19 November 2021 until 31 January 2022.

Ethical committee approval

Before launching the questionnaire, the research protocol, including the questionnaire was submitted to and approved by the Hospital-Faculty Ethics Committee Erasme - ULB (P2021/510). This approval was valid from 15 November 2021 until 31 March 2022.

3.2.2.2 Recruitment of participants

Targeted population

The target group for the patient questionnaire has been defined broadly as it was not the intention to target specific diseases or health care settings (primary care, hospital…). All persons that had contact with a healthcare professional (physician or other) in the last 12 months were eligible to fill in the questionnaire. Furthermore, questions on their health profile were added so a selection of the sample could be made which could help in interpreting the data.

Although children and youngsters (< 18y) may also benefit from integrated care services, we decided to exclude them from our target population, since the selected scales to measure the quality of life and experience of care were targeted to the adult population.

Adult patients in the whole Belgian territory were targeted in this online questionnaire. Although it was not possible to foresee a representative sample of the Belgian population, a target sample size per geographical area was determined based on the population density because it was the intention to give a result of the population's quality of life and experience of integrated care per geographical region (details on targets in supplement). We intended to reach a total of 4 100 persons spread according to the population density per geographical region (see supplement).

Recruitment strategy

Participant recruitment was organised via a stepped indirect approach as there was no existing patient list available to directly reach out to patients. Therefore, relevant organisations and stakeholders were asked to publish a call for participation in our study via their channels (newsletter, website, social media, etc.). To ensure a large variability in respondents and high coverage of the whole country, relevant patient associations, sickness funds, integrated care projects, and other relevant stakeholders such as local authorities (e.g. *"zorgraden"* in Flanders and *"zones de soins"* in Wallonia) and representatives of health and social care providers in Flanders, Wallonia and Brussels were contacted (see colophon). A message to spread the patient questionnaire was prepared in the three national languages (Dutch, French and German) in collaboration with the three umbrella patient organisations (VPP for Flanders, La LUSS for French-speaking patients and Patienten Rat und Treff for the German Community) to address respondents in their native language. Every organisation was free to use this message or adapt it according to their preferences. The link to the questionnaire was sent out to the stakeholders during November and December 2021, who distributed the message over their different channels spread over December.

The targeted number of participants per geographical area was regularly monitored and when response rates in certain areas were much lower, a reminder was sent to specific regional organisations to stimulate them to reshare the questionnaire and motivate their members to participate. Two weeks before the closing date of the questionnaire, the "*zorgraden*" in Flanders ("*eerstelijnszones*") and the "*zones de soins*" in Wallonia, had a low number of participants and were asked to redistribute the questionnaire over their channels. As the number of participants was very low in Brussels, the Facebook groups of the different municipalities in Brussels were addressed to spread the questionnaire on their Facebook page.

3.2.2.3 Statistical analysis

For the analyses, the sample of participants was restricted to those with a self-reported health problem and a care 'network' involving one or several healthcare providers and/or informal carer(s) and/or social care provider(s). This sample selection allowed to identify respondents with potential need of care integration.

Descriptive analysis was used to describe the sample of the study participants (characteristics and care profile, experience of care, and HRQoL). For normally distributed continuous variables, means (M) and standard deviations (SD) were calculated, for non-normally distributed continuous variables, medians, and interquartile ranges IQRs were calculated.

Though the data collection was done at the care zone level, the low response rate made it necessary to perform analysis at the level of regions (Flanders, Wallonia, Brussels (including Dutch and French-speaking respondents)).

Description of the experience of care - PACIC: The answer distribution is shown per PACIC item (also those who did not answer or answered 'non applicable'). For each of the 20 items of the PACIC instrument, an average score and the SD were calculated based on valid responses (i.e. a score between 1 to 5). Beside the score by item, an individual total PACIC score was calculated for each respondent completing at least 15 items of the PACIC instrument with a valid score (n= 1 221). This individual score will be used in the multivariate analysis (see below). The individual PACIC score reflects the mean of the scores on the 20 dimensions of the instrument. The score per item as well as the total PACIC score ranges from 1 to 5. A higher score indicates a perception of a better experience of care.

Description of the HRQoL: While there are several analyses possible, the focus was on the EQ-VAS and the EQ-INDEX. In supplement, the interested reader can find the analysis of the EQ 5D 5L descriptive system and the profiles. The EQ-VAS was described using mean and SD. The EQ-5D INDEX is a value attached to an EQ-5D-5L profile according to a set of weights that reflect on average people's preferences about how good or bad the state is. As the EQ-INDEX score presented a left skew (negative skew), it is analysed using measures of central tendency (median) and dispersion (IQR).[146]

Bivariate analysis was used to test the potential association between characteristics of respondents (i.e.. age categories, gender, regions) and the mean PACIC score. If normally distributed, independent sample T-tests and one-way ANOVA test for continuous variables as well as χ^2-tests for categorical and nominal variables were used. Non-parametric tests (Mann Whitney and Kruskal-Wallis) were used when variables were not normally distributed. The difference in the overall mean PACIC score along socio-demographics was explored via one-way ANOVA testing as the PACIC score behaves like a continuous variable. The differences in answer distribution at the item level were explored via non-parametric tests. EQVAS score was treated as a continuous variable, with only very light skewness. When multiple comparisons were performed, a Bonferroni correction was applied to the p-values to limit the Type I – error.

Multiple linear regression models were built to assess interesting relationships between the overall PACIC score quality of life (EQVAS; EQ-5D-5L INDEX, further referred to as 'INDEX'), gender, age, region, type of health care received, presence of informal care and presence of social care). Different models were built, assessing crude and adjusted relationship (coefficient β) between predictor variables and PACIC individual score either with the EQVAS score (model 1) or the INDEX score (model 2). Interactions between variables were tested. For every analysis, the regression analysis was performed with complete cases (i.e. respondents who answered 15 or more PACIC questions). An imputation method was not implemented for the independent variables as the sample size was large enough and these imputation techniques have a bad influence on the variance within the data. Assumptions for linearity were assessed when building multiple regression models, excluding variables in case they correlate extensively with others. Aside from linearity, also multicollinearity, homoscedasticity, and multivariate normality were checked. As the observations are assumed to be independent due to the nature of the study, the assumption of independent observations was not tested.

Data were analysed using IBM Statistics 23 software and a p-value of 0.05 was considered statistically significant.

3.2.3 Results

3.2.3.1 Analysis of the target population (response rate)

The targeted number of respondents was reached in 48.2% of the care territories. In Wallonia, the targets were reached in 63.8% of the care territories while in Flanders the targets were reached in 50.5% and only in 14.3% for Brussels. Response rates differed by care territories and can be found in supplement.

3.2.3.2 Characteristics of the sample

To identify respondents able to give answers on integrated care experience, only respondents who reported at least one health problem and received care from at least two healthcare providers and/or more than one type of social or informal care (i.e. patients with a care ‘network’) were included in the analysis sample. Therefore, from the 1 810 respondents, 437 participants were excluded because they did not experience a health problem (n= 162), or did not need at least two care providers (n= 275), leading to 1 373 respondents with a valid care profile. The excluded participants were younger (p < 0.001), were mostly inhabitants of Wallonia (56.8%, p < 0.0001), and reported better health-related QoL, compared to the 1 373 included participants. The average PACIC score for the excluded participants who completed at least one item however did not differ significantly from those included in the analysis sample.

Because the focus on evaluating experience of care with the PACIC-questionnaire, only those respondents were included who completed **at least one item of the PACIC instrument in a valid way** (which means that on the 20 items/questions of the PACIC the respondent gives a score between 1 and 5 for at least 1 item/question). Overall, 75 respondents chose ‘Not applicable’ or ‘I do not wish to answer’ for all of the 20 items and are therefore excluded for further analysis. The 75 excluded participants did not differ in age, region, or gender nor did they differ in terms of health-related QoL (EQ-VAS, and INDEX) from the included participants. describes the main socio-demographic characteristics and care network of the 1 298 included respondents.

Table 25 – Participants' sociodemographic characteristics, care network and HRQoL (n= 1 298)

	Flanders (n = 802)	Wallonia (n = 431)	Brussels (n = 65)	Belgium (n = 1 298)
Age category (%)				
18-24	1.75	0.70	1.54	1.39
25-34	4.11	6.96	9.23	5.32
35-44	8.73	16.47	18.46	11.79
45-54	15.59	19.95	27.69	17.64
55-64	23.94	25.75	16.92	24.19
65-74	30.05	19.26	18.46	25.89
75+	15.84	10.90	7.69	13.79
Gender (%)				
Male	40.90	32.02	26.15	37.21
Female	58.98	67.75	73.85	62.63
Other	0.12	0.23	0.00	0.15
Type of care provider consulted (%)				
Only healthcare providers	39.40	48.96	58.46	43.53
Medical and informal care	19.70	24.59	15.38	21.11
Medical and social care	13.72	9.98	10.77	12.33
All three types	27.18	16.47	15.38	23.04
Health-related QoL				
EQ-VAS Mean (SD)	56.18 (20.77)	57.26 (20.50)	58.78 (20.54)	56.66 (20.67)
EQ-5D-5L INDEX Median (IQR)	0.63 (0.47)	0.57 (0.49)	0.69 (0.35)	0.62 (0.48)
EQ-5D-5L INDEX Mean (SD)	0.52 (0.32)	0.50 (0.33)	0.61 (0.28)	0.52 (0.32)

Respondents were asked to indicate some further detail on the type of care they receive. Respondents could choose one or more out of three types of care providers: healthcare, informal care, and social care (see Table 25). Most of the time the respondents received care from both healthcare providers and informal and/or social. However, for 43% of the respondents, the care network consists of only healthcare providers. Respondents living in Flanders are less often describing a network only consisting of healthcare providers than inhabitants of Wallonia and Brussels.

Respondents could choose a combination of five medical care providers: general practitioner, medical specialist (e.g. oncologist, psychiatrist…), pharmacist, nurse, and other types of providers (e.g. physiotherapist, dietician, psychologist). Most of the respondents receive care from three or more healthcare providers (89.91%).

The majority of the respondents included at least a general practitioner (94.3%) and/or a medical specialist (86.5%) in their care network. Table 26 depicts the total of answer choices that were made when asked about the presence of different types of medical care providers in their care network.

About half of the respondents did not include any informal caregiver in their care network (55.9%). Of the respondents that indicated they had informal care, most often it was somebody from the household (71%) (see Table 27).

Table 26 – Types of healthcare provider consulted (n= 1 298)

	% of the respondents
General practitioner	94.30
Specialist	86.52
Home nurse	20.34
Pharmacist	47.53
Other types of medical care providers	66.87

The total percentage of the answer choices does not add up to 100% because respondents could choose a combination of answer possibilities.

Table 27 – Type informal care (n = 573)

	% of the respondents
One or more persons belonging to your household	71.20
One or more relatives who are not part of your household	33.00
One or more persons who do not belong to your household or family	30.00

Table 24 describes the HRQoL of the 1 298 included respondents. All elements of the EQ scale were analysed (EQ profiles, EQ 5D 5L dimensions, EQ INDEX, and EQ-VAS), and have similar findings (further details can be found in the supplement). Focusing on the summary metrics i.e. EQ-VAS, and INDEX, there was no significant difference between the three regions.

3.2.3.3 *Patient experience of integrated care - PACIC*

Among the 1 221 participants with at least a score for 15 items, the mean PACIC score was 2.68 (*SD* = 0.89).

When looking at the regions, the Flemish respondents had a mean of 2.71 (*SD* = 0.90), the Brussel respondents 2.66 (*SD* = 0.86), and the Walloon respondents 2.64 (*SD* = 0.86), which did not differ statistically. In contrast, gender affected the PACIC score. The men had a higher PACIC score than women (Men: M = 2.84, SD = 0.94 versus women: M = 2.59, SD = 0.84; p = 0.000). No significant difference was found for age categories (p > 0.05).

To structure the results, we reported the 20 items of the PACIC instrument according to five sub-scale: (i) patient activation, (ii) delivery system and/or practice design, (iii) goal setting and/or tailoring, (iv) problem solving and/or contextual and (v) follow-up and/or coordination. For each item, the proportion per answer category is reported at the national and regional levels. The tables also show the proportion of participants that answered the item was ‘not applicable’ or when they did not answer at all. This proportion ranged from 6.9% for the item on whether 'the treating doctor or nurse took into account the patient’s individual thoughts when they recommended treatment', to 16.6% for the item on whether 'treating professionals encouraged the patient to participate in activities in the nearby area that might help'. Because of the above-mentioned reasons, the total scores by subscale were not calculated.

Patient activation

The majority of the respondents scored (very) low on all the dimensions linked to patient activation. Almost half of the participants were (generally) not asked about their ideas and expectations when their care plan was drafted, or did not receive information about the treatment options, or were not asked about side effects or events linked to the medication (see Table 28).

Respondents from Flanders (M = 2.98, SD = 1.35) were asked more often if they ever had any problems with their medication than respondents from Wallonia (M = 2.68, SD = 1.40) ($p < 0.001$). Also for this item, there is a significant difference between the mean scores of male and female respondents ($p < 0.01$). Male respondents scored higher (M = 3.01, SD = 1.35) on being asked whether they had problems with their medications than female respondents (M = 2.80, SD = 1.37) ($p<0.01$).

Table 28 – Distribution of the answers per PACIC item, per region related to 'Patient activation'

When I received care for my chronic condition, during the last 12 months:		Never (%)	Generally not (%)	Sometimes (%)	Most of the time (%)	Always (%)	Not applicable (%)	No answer (%)	Score M (SD)*
1. asked about my own ideas and expectations when making a treatment plan.	Belgium	25.58	19.49	18.49	15.41	9.01	6.55	5.47	2.58(1.34)
	Flanders	26.43	17.95	18.70	15.71	7.98	7.36	5.86	2.55(1.33)
	Wallonia	24.83	21.58	17.63	15.08	11.37	4.87	4.64	2.63(1.37)
	Brussels	20.00	24.62	21.54	13.85	6.15	7.69	6.15	2.55(1.22)
2. given choices in treatment that I could think about.	Belgium	22.73	20.34	19.41	17.26	9.24	6.39	4.62	2.66(1.32)
	Flanders	20.07	20.70	21.45	19.08	8.23	6.23	4.24	2.72(1.28)
	Wallonia	27.38	19.95	15.08	14.85	10.90	6.73	5.10	2.57(1.40)
	Brussels	24.62	18.46	23.08	10.77	10.77	6.15	6.15	2.60(1.35)
3. asked if I ever have problems with my medications or their effects.	Belgium	20.34	18.34	21.11	18.80	14.18	3.00	4.24	2.87(1.37)(1)
	Flanders	17.58	16.96	23.19	19.33	15.34	2.87	4.74	2.98(1.35)
	Wallonia	25.75	20.65	17.17	17.17	12.53	3.48	3.25	2.68(1.40)(2)
	Brussels	18.46	20.00	21.54	23.08	10.77	1.54	4.62	2.87(1.31)

The proportions are calculated on n = 1 298, 802, 431 and 65 respectively for Belgium, Flanders, Wallonia, and Brussels

* *mean scores is computed on the basis of valid scores i.e.* $n = n_{total} - n_{not\ applicable} - n_{no\ answer}$

(1) p = 0.01 for the comparison between male and female in this group

(2) p = 0.001 for comparison between Wallonia and Flanders

Delivery system and/or practice design

The use of written material to advise on ways to improve health does not appear to be common practice. Indeed, more than half of the respondents reported that this was never or very rarely offered to them. This trend seems to be more marked in Wallonia compared to Flanders.

More than sixty percent of the Belgian respondents were most of the time or always satisfied with the care they've received (see Table 29). Respondents in the age category 35 to 44 or 45 to 54 were significantly less satisfied than respondents in the eldest age categories. Male respondents were more satisfied with the organisation of care than female respondents.

Table 29 – Distribution of answers per item, per region, related to 'Delivery system and/or practice design'

When I received care for my chronic condition, during the last 12 months:		Never (%)	Generally not (%)	Sometimes (%)	Most of the time (%)	Always (%)	Not applicable (%)	No answer (%)	Score M (SD)*
4. given written/printed instructions with advice on how to improve my health (e.g., a brochure).	Belgium	32.82	21.03	20.34	10.94	5.01	5.32	4.55	**2.27(1.23)**(1)
	Flanders	29.43	20.57	24.06	11.10	5.36	5.36	4.11	2.36(1.22)
	Wallonia	38.75	21.35	13.46	11.14	5.10	5.10	5.10	**2.14(1.25,)**(2)
	Brussels	35.38	24.62	20.00	7.69	0.00	6.15	6.15	2.00(1.00)
5. satisfied with the organisation of the care I received.	Belgium	2.31	9.86	16.80	40.45	20.88	4.70	5.01	**3.75(1.01)**(3)
	Flanders	2.24	9.85	17.46	38.65	20.45	5.99	5.36	3.74(1.02)
	Wallonia	2.55	10.21	14.39	43.62	22.27	2.32	4.64	3.78(1.02)
	Brussels	1.54	7.69	24.62	41.54	16.92	4.62	3.08	3.70(0.93)
6. explained how my own actions or behaviours affect my health.	Belgium	13.87	16.18	25.73	22.88	11.63	4.85	4.85	**3.02(1.25)**(4)
	Flanders	13.97	15.59	26.56	23.07	10.60	5.11	5.11	3.01(1.24)
	Wallonia	13.69	17.87	24.13	22.04	13.69	4.87	3.71	3.05(1.28)
	Brussels	13.85	12.31	26.15	26.15	10.77	1.54	9.23	3.09(1.25)

The proportions are calculated on n = 1 298, 802, 431 and 65 respectively for Belgium, Flanders, Wallonia, and Brussels

** mean scores is computed on the basis of valid scores i.e.* $n = n_{total} - n_{not\ applicable} - n_{no\ answer}$

(1) *in the age category 35 to 44 were given less a written/printed instruction with advice than respondents in older age categories (p < .05). The mean score of male respondents (M = 2.50, SD = 1.28) is higher than the mean score of female respondents (M = 2.13, SD = 1.17) (p < .0001)*

(2) *P=0.004 for comparison between Wallonia and Flanders*

(3) *in the age category 35 to 44 or 45 to 54 were significantly (p<0.05) less satisfied than respondents in the eldest age categories. mean score of male respondents (M = 3.99, SD = 0.94) is higher than the mean score of female respondents (M = 3.61, SD = 1.03)*

(4) *male respondents (M = 3.15, SD = 1.28) are significantly (p = 0.01) more often explained how their own actions or behaviours affect their health than female respondents (M = 2.95, SD = 1.23)*

Goal setting and/or tailoring

As shown in Table 30, more than half of the respondents were not asked about the goals they would like to achieve in their care process. Participants from Wallonia were asked less often about their expectations than participants from Flanders (p< 0.001).

Approximately half of the respondents stated that they did not receive a copy of their treatment plan. However, it occurred more often in Wallonia than in Flanders (p=0.03) and in respondents aged between 65 and 74y than in those aged between 65-74y (p < 0.01). Encouraging patients to attend courses or group meetings to cope with their health problems was not reported as a common practice in Belgium as the proportion of participants answering 'never' reached 50%. In addition, almost 10% of the respondents score this item as 'not applicable', and more than 5% did not fill in.

Overall, female respondents had a statistically significantly lower mean score on all items of the scale 'Goal setting/tailoring'.

Table 30 – Distribution of answers per item, per region, related to 'Goal setting/tailoring'

When I received care for my chronic condition, during the last 12 months:		Never (%)	Generally not (%)	Sometimes (%)	Most of the time (%)	Always (%)	Not applicable (%)	No answer (%)	Score M (SD)*
7. asked to explain the goals I would like to achieve in my care process.	Belgium	35.59	19.57	14.79	12.17	5.86	6.47	5.55	**2.24(1.29)**(1)
	Flanders	31.67	19.95	15.84	14.34	6.36	6.11	5.74	2.36(1.31)
	Wallonia	42.46	19.03	12.06	8.82	5.80	6.96	4.87	**2.05(1.27)**(2)
	Brussels	38.46	18.46	20.00	7.69	0.00	7.69	7.69	1.96(1.04)
8. helped to set specific goals to improve my eating habits and exercise patterns.	Belgium	22.65	19.26	24.27	15.02	7.24	6.24	5.32	**2.60(1.26)**(3)
	Flanders	22.57	17.58	26.06	15.46	5.99	6.73	5.61	2.60 (1.23)
	Wallonia	22.74	22.74	21.58	13.69	9.51	5.57	4.18	2.61(1.30)
	Brussels	23.08	16.92	20	18.46	7.69	4.61	9.23	2.66(1.32)
9. given a copy of my treatment plan.	Belgium	38.60	16.02	10.71	10.55	11.71	7.70	4.70	**2.32(1.46)**(4)
	Flanders	37.91	17.33	11.35	9.73	9.35	9.73	4.61	2.24 (1.40)
	Wallonia	40.60	14.15	8.35	12.06	16.47	3.71	4.64	**2.45 (1.58)** (5)
	Brussels	33.85	12.31	18.46	10.77	9.23	9.23	6.15	2.40(1.41)
10. encouraged to go to a course or (group-) meeting that might help me cope with my health problem.	Belgium	47.84	17.03	13.64	4.62	2.23	9.40	5.24	**1.79(1.06)**(6)
	Flanders	41.90	18.58	16.71	6.11	2.74	9.35	4.61	**1.94(1.12)** (7)
	Wallonia	57.31	14.39	8.58	2.32	1.62	9.74	6.03	1.53(0.92)
	Brussels	58.46	15.38	9.23	1.54	7.69	3.08	4.62	1.45(0.77)

11. asked questions about my lifestyle (smoking, exercise, eating, etc.) either directly or through a questionnaire.	Belgium	11.71	13.56	23.42	25.19	18.57	3.31	4.24	**3.27(1.29)**(8)
	Flanders	11.60	10.85	24.19	27.18	18.20	3.87	4.11	3.32(1.27)
	Wallonia	11.14	18.33	21.81	22.51	19.49	2.55	4.18	3.22(1.31)
	Brussels	16.92	15.38	24.62	18.46	16.92	1.54	6.15	3.03(1.37)

The proportions are calculated on n = 1 298, 802, 431 and 65 respectively for Belgium, Flanders, Wallonia, and Brussels

** mean scores is computed on the basis of valid scores i.e.* $n = n_{total} - n_{not\ applicable} - n_{no\ answer}$

(1) p = 0.02 The mean score of male respondents (M = 2.36, SD = 1.35) is higher than the mean score of female respondents (M = 2.18, SD = 1.26)

(2) p < 0.001 Participants from Wallonia (M = 2.05, SD = 1.27) were asked less about what they would like to achieve from the care of their health problem than participants from Flanders (M = 2.36, SD = 1.31).

(3) p = 0.04 The mean score of male respondents (M = 2.71, SD = 1.28) is higher than the mean score of female respondents (M = 2.55, SD = 1.25)

(4) p < 0.001 The mean score of male respondents (M = 2.56, SD = 1.55) is higher than the mean score of female respondents (M = 2.19, SD = 1.40). Respondents between the age of 25 and 34 (M = 2.06, SD = 1.07) score significantly worse than respondents within the age of 65 to 74 (M = 2.84, SD = 1.52). (p < 0.01)

(5) p = 0.03 Participants from Wallonia (M = 2.45, SD = 1.58) get given a copy of the treatment plan more often than respondents living in Flanders (M = 2.24, SD = 1.40)

(6) p = 0.04 The mean score of male respondents (M = 1.87, SD = 1.10) is higher than the mean score of female respondents (M = 1.74, SD = 1.04)

(7) p < 0.001 Respondents living in Flanders (M = 1.94, SD = 1.12) score higher on being encouraged to go to a group meeting that might help them cope with their health problem than respondents living in Wallonia (M = 1.53, SD = 0.92) or Brussels (M = 1.45, SD = 0.77)

(8) p < 0.001 The mean score of male respondents (M = 3.47, SD = 1.27) is higher than the mean score of female respondents (M = 3.16, SD = 1.28)

Problem solving/contextual

While more than half of the respondents indicated having no shared treatment plan (table 31), the majority of respondents had the feeling that the health care provider took into account their preferences when recommending treatment (item 12) However, respondents from Flanders scored better than respondents from Wallonia on item related to the care provider's consideration of the impact of the health problem on the patient's life (p=0.013) but felt less sure that patient values were considered (p<0.01). For the latter, respondents between the age of 25 to 34 score lower than those in the age group 75+ (p=0.01).

Female respondents scored significantly lower (p<0.05) on all dimensions of the ‘Problem solving’ scale than male respondents.

Table 31 – Distribution of answers per item, per region, related to ‘Problem solving/contextual’

When I received care for my chronic condition, during the last 12 months:		Never (%)	Generally not (%)	Sometimes (%)	Most of the time (%)	Always (%)	Not applicable (%)	No answer (%)	Score M (SD)*
12. sure that my doctor or nurse took into account what I thought was important when they recommended treatments to me.	Belgium	6.39	11.94	17.41	30.66	26.66	2.47	4.47	**3.64(1.21)**(1)
	Flanders	6.61	13.47	17.58	31.42	23.44	3.12	4.36	**3.56(1.21)**(2)
	Wallonia	6.03	10.21	16.24	28.77	32.95	1.39	4.41	3.77(1.22)
	Brussels	6.15	4.62	23.08	33.85	24.62	1.54	6.15	3.72(1.12)
13. helped to make a treatment plan that I could apply in my daily life.	Belgium	33.74	17.87	13.79	13.79	7.40	8.32	5.08	**2.34(1.36)** (3)
	Flanders	34.41	18.58	14.21	13.34	5.24	9.10	5.11	2.26(1.29)
	Wallonia	32.95	17.40	12.76	14.39	10.90	6.73	4.87	2.47(1.44)
	Brussels	30.77	12.31	15.38	15.38	10.77	9.23	6.15	2.56(1.46)
14. assisted to plan ahead so that I can deal with my health problem even when I feel sick or unwell.	Belgium	26.04	23.50	16.33	15.72	6.86	7.01	4.55	**2.48(1.29)** (4)
	Flanders	26.31	24.19	17.08	14.84	6.36	6.73	4.49	2.45(1.27)
	Wallonia	26.22	21.81	16.24	17.17	7.42	6.73	4.41	2.52(1.32)
	Brussels	21.54	26.15	7.69	16.92	9.23	12.31	6.15	2.58(1.38)
15. asked how my health problem affects my life.	Belgium	22.11	19.95	21.11	18.10	11.56	2.39	4.78	**2.75 (1.34)** (5)
	Flanders	21.07	17.71	21.45	20.07	11.72	2.74	5.24	**2.82(1.34)**(6)
	Wallonia	24.36	24.59	19.72	14.39	11.37	2.09	3.48	2.62(1.34)
	Brussels	20.00	16.92	26.15	18.46	10.77	0.00	7.69	2.82(1.31)

The proportions are calculated on n = 1 298, 802, 431 and 65 respectively for Belgium, Flanders, Wallonia, and Brussels

** mean scores is computed on the basis of valid scores i.e.* $n = n_{total} - n_{not\ applicable} - n_{no\ answer}$

(1) *respondents between the age of 25 to 34 (M = 3.20, SD = 1.22) score lower than respondents in the age group 75+ (M = 3.86, SD = 1.14) (p < 0.01) at being sure that their doctor or nurse took into account what they thought was important to their treatments. The mean score of male respondents (M = 3.76, SD = 1.24) is higher than the mean score of female respondents (M = 3.57, SD = 1.19) (p < 0.01).*

(2) *p<0.01 Respondents from Flanders (M = 3.56, SD = 1.21) felt less sure that their doctor and/or nurse took into account what they thought was important than respondents from Wallonia (M = 3.77, SD = 1.22)*

(3) *p < 0.05 The mean score of male respondents (M = 2.48, SD = 1.42) is higher than the mean score of female respondents (M = 2.26, SD = 1.31)*

(4) *p < 0.01 The mean score of male respondents (M = 2.61, SD = 1.33) is higher than the mean score of female respondents (M = 2.40, SD = 1.26)*

(5) *p < 0.01 The mean score of male respondents (M = 2.90, SD = 1.37) is higher than the mean score of female respondents (M = 2.67, SD = 1.32)*

(6) *p =0.013 Respondents from Flanders (M = 2.82, SD =1.34), were asked more about how their health problems affect their life than respondents from Wallonia (M = 2.62, SD = 1.34).*

Follow-up and/or coordination

Table 32 shows that more than half of the respondents were never contacted after a visit to the doctor to ask again how they were doing. It seems that Flemish respondents were more often contacted than respondents from Wallonia. In addition, male and older respondents were also more often re-contacted than women (p<0.001) and young people (p<0.05).

More than 40% of the respondents were never encouraged to participate in supportive activities. In addition to never being encouraged to participate, the item doesn't apply to 11% of the respondents and more than 5% did not answer. Women reported that they were less often encouraged (p<0.01), as well as respondents from Wallonia and Brussels (p<0.001) or 35-44y respondents in comparison with those aged between 65-74y.

The majority of respondents indicated that referral to other social or healthcare professionals was never to sometimes done. However, it seems to be done more often in Wallonia than in Flanders (p<0.01).

Moreover, most respondents were never to sometimes asked how the contact with other professionals went. Women were less frequently asked on how their visits to other doctors went compared to men (p<0.001).

Table 32 – Distribution of answers per item, per region, related to 'follow-up and/or coordination'

When I received care for my chronic condition, during the last 12 months:		Never (%)	Generally not (%)	Sometimes (%)	Most of the time (%)	Always (%)	Not applicable (%)	No answer (%)	Score M (SD)*
16. contacted after a visit to the family doctor, medical specialist, or nurse to ask again how I was doing.	Belgium	54.24	17.72	11.71	5.62	3.00	2.93	4.78	**1.76 (1.09)**(1)(2)
	Flanders	50.37	19.33	13.22	5.86	2.99	3.24	4.99	**1.82 (1.10)**(3)
	Wallonia	60.56	14.85	8.82	5.57	3.48	2.78	3.94	1.68 (1.10)
	Brussels	60.00	16.92	12.31	3.08	0.00	0.00	7.69	1.55 (0.85)
17. encouraged to participate in activities in my area that might help me.	Belgium	40.83	16.33	14.41	8.94	2.93	11.02	5.55	**2.00 (1.19)**(4)(5)
	Flanders	32.79	18.83	18.20	11.35	3.74	9.48	5.61	**2.23 (1.22)**(6)
	Wallonia	54.29	11.60	8.58	5.34	1.62	13.46	5.10	1.63 (1.04)
	Brussels	50.77	16.92	6.15	3.08	1.54	13.85	7.69	1.57 (0.94)
18. referred to a dietician, a physiotherapist or a social worker.	Belgium	21.57	16.49	23.11	15.87	10.17	8.17	4.62	2.73 (1.33)
	Flanders	23.19	17.46	21.82	15.71	8.23	8.85	4.74	**2.63 (1.31)** (7)
	Wallonia	18.33	15.08	25.75	15.78	13.46	7.42	4.18	2.90 (1.33)
	Brussels	23.08	13.85	21.54	18.46	12.31	4.62	6.15	2.81 (1.39)

19. explanation of the importance for my treatment to consult other specialists.	Belgium	13.64	15.95	17.64	21.34	20.80	5.78	4.85	**3.22 (1.38)**
	Flanders	13.72	15.34	18.33	21.70	20.07	5.49	5.36	3.21 (1.37)
	Wallonia	14.39	17.87	16.24	19.26	22.27	5.80	4.18	3.19 (1.42)
	Brussels	7.69	10.77	18.46	30.77	20.00	9.23	3.08	3.51 (1.23)
20. asked how my visits to other doctors went	Belgium	27.73	21.57	17.87	15.49	8.24	3.78	5.32	**2.50 (1.32)** (8)
	Flanders	26.18	21.70	18.33	16.21	7.48	4.36	5.74	2.52 (1.30)
	Wallonia	30.63	21.58	16.71	13.23	10.21	3.02	4.64	2.47 (1.37)
	Brussels	27.69	20.00	20.00	21.54	4.62	1.54	4.62	2.52 (1.27)

The proportions are calculated on n = 1 298, 802, 431 and 65 respectively for Belgium, Flanders, Wallonia, and Brussels

** mean scores is computed on the basis of valid scores i.e.* $n = n_{total} - n_{not\ applicable} - n_{no\ answer}$

(1) *(p < .05) participants between the age of 45 to 54(M = 1.77, SD = 1.03) score lower than respondents in the age group of 75+ (M = 2.20, SD = 1.31) at being contacted after a visit to the family doctor to ask again how they were doing. Also participants between the age of 25 and 34 (M = 1.60, SD = 1.02) score lower than respondents of 65 and above (p <0.05)*

(2) *(p < .0001), namely female respondents score significantly lower (M = 1.65, 1.02) than male respondents (M = 1.95, SD = 1.19).*

(3) *(p < 0.05) respondents living in Flanders (M = 1.82, SD = 1.10) were more frequently contacted to ask how they were doing than respondents from Wallonia (M = 1.68, SD = 1.10).*

(4) *Participants in the age group 35-44 (M = 2.03, SD = 1.07) and in the age group 45-54 (M = 2.20, SD = 1.13) are less frequently encouraged to participate in activities in their area than those from the age group 65-74 (M = 2.67, SD = 1.26). (p < 0.05)*

(5) *(p < .01) in which women score lower (M = 1.92, SD = 1.16) than men (M = 2.15, SD = 1.22) from this sample.*

(6) *(p = .000) Flanders (M = 2.23, SD = 1.22) scored higher than Wallonia (M = 1.63, SD = 1.04) and Brussels (M = 1.57, SD = 0.94).*

(7) *(p < 0.01) Flanders (M = 2.63, SD = 1.31) scored lower than Wallonia (M = 2.90, SD = 1.33)*

(8) *(p<0.0001) male respondents (M = 2.69, SD = 1.36) score higher on being asked how their visits to other doctors went than female respondents (M = 2.40, SD = 1.29).*

3.2.3.4 *Factors associated with the PACIC score*

Based on the bivariate analysis and literature review[135, 147], eight variables were added as potential independent variables. Table 33 details these variables and the construction of the dummy variables used as a basis for the interpretation of the analysis. Several models were built and tested (see supplement).

Table 33 – Covariates in the association between PACIC

	Categories	Dummy*	Remarks
		Sociodemographic variables	
Gender	Female Male	0. Female 1. Male	Answer option “other” not included due to the low sample size
Age	18-24 25-34 35-44 45-54 55-64 65-74 75+	0. 54 or younger 1. 55 or older	Exploratory analysis showed a significant difference between the age categories 55-64 and older. Therefore, it was decided to take this category as a base for comparison.
Language	French Dutch	0. Dutch 1. French	
		Health-related variables	
Health problem	Yes, one Yes, multiple No I do not wish to answer	0. Yes, one 1. Yes, multiple	As only people who have at least one health problem are included in the study.
Informal care	Yes No I do not wish to answer	0. Yes 1. No	For the multivariate analysis, the category “I do not wish to answer” is treated as a missing value.
Social care	Yes	0. Yes	

	No I do not wish to answer	1. No	For the multivariate analysis, the category “I do not wish to answer” is treated as a missing value.
Types of care providers	Only health care Health care + informal care Health care + welfare care All types	0. Only health care 1. Health care + informal and/or welfare care	‘Only health care' means a respondent includes at least two medical care providers in the network.
HRQoL			EQVAS and EQ-5D-5L INDEX are used as continuous variables

The analysis reveals an endogeneity issue due to the correlation between EQVAS and EQ-5D-5L INDEX because they both measure the health-related quality of life with only a slight difference (r = 0.69, p < 0.05). Therefore, the PACIC model is duplicated: once with the EQVAS score included and once with the EQ-5D-5L INDEX score included.

Overall both variations of the model explain only about 5% of the variance in the PACIC score (PACIC model with EQVAS: $R^2 = 0.0553$, adjusted $R^2 = 0.0488$; PACIC model with EQ-5D-5L INDEX: $R^2 = 0.05617$, adjusted $R^2 = 0. 04965$). The results should thus be interpreted with caution and are mainly to point towards interesting associations of the dependent variable, knowing that there is much unexplained variance. That said, the multivariate regression model (see Table 34) confirms that the EQVAS score, though only very small (β=0.006, $p < 0.0001$) as well as the EQ-5D-5L INDEX score (β=0.4143, $p < 0.0001$) are associated with the PACIC score (i.e. a better rated HRQoL was associated with a better rated experience of care).

The multivariate regression model further shows that male respondents have a significantly better PACIC score in the model including EQVAS ($p < 0.001$) as well as the model including the EQ-5D-5L INDEX score ($p < 0.001$).

The same health-related variables that drive the PACIC score when including EQVAS score also drive the PACIC score when including the EQ-5D-5L INDEX-score. More specifically, having no informal care provider ($p < 0.001$) or no social care provider ($p < 0.01$) has a negative impact on the PACIC score.

Table 34 – PACIC models

	Condition	β	95% CI		β	*95% CI*	
PACIC MODEL		*EQ VAS*			EQ INDEX		
HRQoL (EQVAS or INDEX)		0.0064	0.004 - 0009	***	0.4143	0.24 – 0.58	***
Gender	*Male*	0.2381	0.13 - 0.34	***	0.2221	0.12 – 0.33	***
Age	*Older than 55*	-0.0004	-0.08 – 0.08		0.0165	-0.06 - 0.09	
Language	*French*	-0.0216	-0.13 - 0.08		-0.0044	-0.11 – 0.10	
Health problem	*Yes, multiple*	-0.0144	-0.12 - 0.09		-0.018	-0.12 – 0.09	
Informal care	*No*	-0.2782	-0.45 - -0.11	**	-0.3272	-0.50 - -0.15	***
Social care	*No*	-0.1832	-0.33 - -0.03	*	-0.1825	-0.33 - -0.03	*
Several types of care providers	*Yes*	-0.0563	-0.21 – 0.10		-0.0631	-0.22 – 0.09	

** significance level p <0.05; ** p<0.01 and *** <0.001*

3.3 Discussion

Overall, the professionals participating in the online survey assessed the maturity of integrated care as ‘low’, and patients had a rather poor perception of the alignment of their care with the Chronic care model.

The professionals' perception of the integrated care maturity was assessed using a validated tool (SCIROCCO) [39-41] and questions on the achievement of policy aims in Belgium (see chapter 2). Both assessments lead to the conclusion that Belgium is still in the initial phase of the transition towards integrated care. Indeed, the majority of the 12 SCIROCCO dimensions scored very low (i.e., a median score of 1 on a scale of 0 to 5) but three dimensions (‘*Population Approach’, ‘Process Coordination’, and ‘Evaluation Methods*’) were rated slightly more mature (with a median score of 2). There was some level of consensus among professionals (i.e., the dispersion of the answer distribution was zero) for the dimensions ‘*Finance and funding’* and ‘*Removal of inhibitors'* dimensions, while the answer distribution for the *'Evaluation methods'* dimension was more scattered. The maturity scoring in terms of policy aims is consistent with the SCIROCCO scoring. Most of the aims received a score of 1 or 2 on a scale from 0 to 4 where the maximum score indicated that an aim has been achieved. The stakeholders perceived three dimensions ('Population approach’, ‘Process Coordination’ and ‘Evaluation methods’) as slightly more mature than the other dimensions. In contrast, more than 30% of the professionals surveyed indicated that nothing is being done for *'Developing synergies between federal and regional levels'*, *'Ensuring the necessary recruitment of health care professionals*” or “*Strengthening a person's self-management or empowering through new financing models’ and ‘Simplifying, integrating and improving the efficacy of organisations and structures’*. The sub-analyses are focused on presenting the survey results by region, since the analyses of the maturity by professional profile did not enable further interpreting of the maturity score (low number of respondents in several professional categories, convenience sample, etc.). No regional difference in the maturity rating was observed for two-third of the dimensions. Compared with the other two regions, the professionals from Flanders scored somewhat better on the following SCIROCCO dimensions: *'Readiness to Change'*, *'Capacity Building'*, and *'Structure & Governance'* (see Table 17). In Flanders, seven out of the eight aims attached to the ‘Structure and Governance’ dimension also scored slightly better (see Table 20). A better rating in the North of the country in terms of ‘Structure and governance’, might be explained by the territorial approach developed in Flanders where 60 primary care zones were established, each with a care council that includes health and social sector representatives as well as local authorities and people in need of care and support.[80] In contrast, the setup of primary care territories is not yet finalised in the two other regions.[93, 148] The professionals from Wallonia gave the SCIROCCO dimension '*Digital Infrastructure'* a somewhat better score. However, the results at the regional level must be interpreted with caution because of the low sample size for Brussels and the variability in the characteristics of respondents per region, for which no adjustment was made.

The SCIROCCO tool is designed to be used as a starting point of discussion to arrive at a consensus among stakeholders and to co-design future policy plans. In our study, the results of the maturity were used as input for the discussion groups in the next phase of the research. However, as the aim of the tool is also to facilitate understanding of local readiness, they were also used to get a snapshot of a country's maturity. To date, Switzerland is the only country that also measured maturity at the national level, in 2019, at the national level via an online survey (n = 642) using the SCIROCCO questions and scoring system.[55] They obtained similar results with a predominant median of 1, and a median of 2 for four of the Sirocco dimensions ('*Removal of Inhibitors', 'Population Approach', 'Citizen Empowerment', and 'Evaluation Methods'*), and concluded an overall limited maturity of the Swiss health care system for integrated care. Peytremann and co-authors explain the low maturity by the fact that the organisation of integrated care, and health care in general, is not centralised. Switzerland's federal structure is characterised by a complex division of tasks and funding between the federal and cantonal levels. For instance, each canton is responsible for securing health care provision for its own population [149] This complexity and fragmentation of the Swiss health system prevent rapid and large-scale development of integrated care.[113]

While our study is the first attempt at providing a snapshot of the maturity level of integrated care in Belgium via a large consultation of professionals, evaluation of IC through interviews of key professionals was previously performed for chronic care at the Federal level and in Flanders. [112, 116] Similarly to our findings, the authors concluded that the current implementation of integrated care was perceived to be low. In addition, Flanders conducted its own experiment when the Flanders Agency for Care and Health together with VIVEL, did a maturity check with the SCIROCCO tool in December 2019 by sending the online questionnaire to 15 member-stakeholders of VIVEL's board of directors of VIVEL, of which 12 participated. [54, 150] They concluded that individual assessments of the SCIROCCO dimensions are notably influenced by the context of the times (e.g., some were concerned about the Flanders government's current budget cuts) as well as by the complicated structure of the Belgium government. The more local the professionals, the less confidence there was with regards to structural arrangements, while at the regional level, confidence levels were higher. The two most divergent scores (ranging from 0 to 4) were observed for 'Structure and Governance' and 'Breadth of Ambition'. Compared to the present study and the Swiss study, the Flemish study followed the whole SCIROCCO methodology and organised a discussion group to come to a consensus score for each dimension. This overall consensus diagram showed that none of the dimensions scored highly (maximum score was 3 for 'Structure and governance'). Moreover, in Flanders, the intention is to continue to work with this tool, i.e. to guide the 60 care councils of the primary care zones in drafting their strategical plan for their respective care zones. During the same time period as this online survey took place, a pilot project was initiated by VIVEL, using an adapted version of the SCIROCCO tool, and was tested in three primary care zones.

The care experience of chronic patients who rely on several health and/or social care providers was measured by the PACIC instrument.[127] This instrument has been designed to assess the chronic care model and was chosen in this study as a proxy for assessing 'integrated care". However, it has been said that integration of care which often focuses on organisational integration, does not really impact the care experience.[151] Nevertheless, the transition towards more integrated care also aims to offer more appropriate, goal-oriented and tailored services for patients with complex needs and to achieve the Quintuple aim.[6-8] A better care experience, which is one of the five aims in the Quintuple Aim, is an important leitmotiv for the policy makers and reformers, therefore it seems important to assess the current care experience of the Belgian citizens. Experience of care is foremost defined by the interaction between patients and care professionals, but also, the system level determines care experience, i.e. whether it is possible to have a seamless and smooth journey through the system. However, the PACIC is not the ideal tool to assess whether the care is perceived as seamless or coordinated (see limitations section) but focuses more on aspects such as whether the care stimulates patient activation and patient implication in the treatment. The 20 items of the PACIC result in an overall score, though we believe the separate items of the PACIC are more interesting to report.

With an overall mean score of 2.65 on a scale of 1 to 5, the respondents indicated that they perceived the experience of care to be 'low to moderate'. After adjustment were made for potential confounders, no regional difference was observed. Based on the available variables, this study identified some associations with a higher PACIC score such as gender (men reported better experience of care), health-related quality of life as assessed with the EQ-5D-5L instrument and having a network including an informal or a social care provider. However, we must exercise caution when interpreting the results because the multivariate model only accounted for 5% of the variance, leading us to think that other crucial confounders were not captured in our survey, namely education[131], disease burden, and socioeconomic status.

When focusing on item level, the respondents answered for most items with "never to sometimes". The lowest mean score was 1.76 (item 16 regarding 'being re-contacted after a consultation' see table 32), and for 4 out of 20 items the mean score was more than 3 (i.e., items 5, 11,12, and 19 from Table 28 to Table 32). The highest score was attributed to the level of satisfaction with the organisation of care (item 5: mean PACIC score= 3.75). From the perspective of integrated care, the items regarding communication with a patient (e.g., around a care plan, and care goals) and follow-up (item 16 and 20) are the most relevant but were scored rather low. While more than half of the respondents were not asked about the goals they would like to achieve in their care process, the majority assumed that healthcare providers know what is important to the patient (i.e., took into account their preferences when recommending treatment). Some small differences were found when comparing regions, though we must interpret these carefully as no multivariable analysis at the level of each item was performed to control for other factors, including the very low sample size for Brussels. In 16 out of 20 items, men had a more positive perception of their care experience than women (see items 3-17 and 20, from Table 28 to Table 32). We also observed that 6 out of 20 items were better scored by older respondents than by younger ones (see items 4, 5, 9, 12,16 and 17 from Table 28 to Table 32). Also, the HRQoL was perceived lower in younger patients. A hypothesis to explain this could be that our recruitment strategy might have reached young patients with a higher disease burden compared to older patients (organisations for cancer patients, rare diseases). Unfortunately, we have not collected information on disease burden.

In an attempt to put the results of this study into context, we show some results from other studies where the experience of care was assessed cross-sectionally. In Flanders, a study with the same recruitment design assessed the PACIC in 339 patients with chronic diseases (i.e., chronic back pain, multiple sclerosis, chronic neck pain, osteoarthritis and hypertension). The authors found a similar mean PACIC score (mean score of 2.87 versus 2.68 in our study).[131] In a recent study on the performance of the Belgian healthcare system[42], a high satisfaction rate in terms of the care received was also observed with chronic patients. This is in line with highest score attributed to 'satisfaction with the organisation of care' in our study. International literature shows that PACIC mean score varies from 2.4[140] to 3.0[152]. However, comparison with our study is impaired because of variations in target population (overall chronic patients[153] versus disease-specific population[154,155,135]), care setting[152], form of PACIC[147] (PACIC versus PACIC 5A[156]).

Limitations and implications for further research

In this study, we opted for a design based on the use of validated measurement tools. In order to assess the stakeholders' perception of integrated care, we opted for the SCIROCCO tool. Despite its validation in several languages, a significant proportion of respondents were not able to assess certain dimensions. Depending on the dimension considered, the option 'I don't know / I don't understand' was chosen 6 to 16% of the time. Together with the high rate of missing's, these percentages raise the question of the tool's suitability for the complexity of the Belgian health care system. Furthermore, efficiency arguments drove us to mix the evaluation of maturity of integrated care by SCIROCCO with the assessment of the achievement of policy aims. In addition to saving time in collecting data, grouping the Sirocco dimension assessment with the policy aims allowed us to keep the same group of assessors for both evaluations. Questions regarding the policy aims were not part of the validated tool but the option 'I don't know / I don't understand' was somewhat less often selected than for the SCIROCCO dimensions (between 2 and 12%). Due to time constraints, we were not able to pilot the questionnaire on a large scale to improve participant understanding, which resulted in a rather long questionnaire. However, question randomisation did limit the occurrence of unbalance in unrated dimensions/policy aims.

The PACIC instrument was chosen as it meets all the pre-defined selection criteria (see section 3.2.2.1) and was agreed upon by the consulted Belgian patient associations (LUSS, VPP, Patienten Rat und Treff), though appointed important limitations. The PACIC questionnaire does not seem to have specific questions on the topic of collaboration and coordination between health care professionals, the social care sector, or between sectors. The topics of 'organisation of care' and 'referrals' are informative but do not go in depth enough in terms of collaboration or integration of care. Several tools were screened, of which some had more focused questions on collaboration [157-166] though they did not meet our pre-defined selection criteria (e.g. available in Dutch, French, German). Although the PACIC tool is not disease-specific and should be applicable to different groups of patients, and has been recommended in previous research,[125, 126] we noticed that some PACIC questions are not easy to interpret or are simply not applicable to a patient's context. The occurrence of nonresponse in this study varied from 7% to 17% which is similar to proportions mentioned in other studies (around 9% to 15% [135, 140, 141]). Moreover, the interpretation of a statistically significant association between variables and the PACIC score is difficult to do as the minimum clinically-important difference (MCID) for the PACIC is unknown. A recent study based on a pan-European project, SUSTAIN, on how to capture the patient experience in integrated care, highlighted the added value of mixed methods and the use of qualitative approaches such as in-depth interviewing to develop a nuanced understanding.[163] Beside the mixed methods, other promising tools are currently in development such as Patient-Reported Indicator Surveys (PaRIS) [124] and an instrument to measure patient care experiences in primary care (including elements on integrated care) by the Flemish patient organisation (VPP).[167]

For the maturity assessment by stakeholders of IC, we only included respondents who scored at least one dimension or one aim; 200 people did not score any SCIROCCO dimensions or aims and were thus removed. The characteristics of these 200 did not statistically differ from the respondents' in terms of distribution between the macro, meso and micro levels, but they had statistically significant lower professional experience than the participants included in the result analysis (professional experience longer than 10 years: participants excluded from the analysis 59% (n=200) vs. participants included in the analysis 71% (n=865), p=0.003). For the patients' care experience, 75 respondents were excluded from the PACIC assessment because they chose 'Not applicable' or 'I do not wish to answer' for all of the 20 items. These participants did not differ in age, region, or gender, nor did they differ in terms of HRQoL compared to the included participants. Therefore, we expect no non-response bias.

An important limitation to consider for the interpretation of results, is that neither the professional nor the patient sample was representative. Selection bias could not have been avoided due to the recruitment strategy and online format. However, more than 800 professionals involved in the policy, management, or provision of health or social care participated in the stakeholder survey. They were diverse in terms of the structure they worked for, the sectors, the micro-, meso-, and macro-level, and evenly distributed across the Belgian territory: 137 stakeholders were from Brussels, 392 from Flanders, 331 from Wallonia, and 5 were federal stakeholders (German-speaking stakeholders were not targeted in this survey as there was a similar on-going initiative in Ostbelgien; see Box 2). No databases on stakeholders involved in integrated care are available to check representativity of our stakeholder sample or to check if the variability in stakeholders' profile was reached. The recruitment of patients was not evident, and the indirect approach relying on the willingness of patient organisations and other stakeholders to distribute the survey among their members might have limited the representativeness and does not allow us to reach the predefined target. Unfortunately, it was not possible to check in depth the representativeness of our sample because the characteristics of chronic patients are only partially available. Based on prevalence data of chronic diseases in the Belgian population derived from a representative sample from the Belgian Health Survey in 2018[168] and the population census the same year[169], the ratio of women with chronic diseases is 55%. This ratio is 63% in our sample and thus potentially indicates an overrepresentation of women in our sample. In addition, based on the same calculation, it seems that people aged 75 and over appear to be under-represented in our sample, while people aged 65-74 appear to be over-represented. Therefore, these results have to be interpreted with caution. While more than 2 000 responded, only 1 298 patients were included in the analysis because they had a self-reported health problem and relied on several care professionals and/or informal care. The main reason for not reaching the target patient population was the limited direct access to patients due to lack of patient lists available. Consequently, we had to use an indirect approach to recruit patients and had to rely on the distribution and outreach of the organisations we contacted. Reaching the target patient population was additionally hampered by the fact the survey was conducted online, which limits access for some patient groups (older patients for example). However, we observed that 179 respondents aged 75 and older did fill in this questionnaire.

Although this was a convenience sample, the response was distributed rather evenly throughout Flanders and Wallonia, which can be explained by the fact that we monitored the target population weekly per care zone, and initiated extra recruiting initiatives (via Facebook, reminders…) when response rates were low. For the Brussels region, recruitment appeared to be difficult and should be a point of focus when conducting future similar surveys. While this patient sample is a convenience sample, the use of the EQ-5D-5L as a measure for HRQoL made it possible to compare our results on HRQoL with a national representative sample (Belgian Health Interview Survey). [170] According to the Belgian Health Survey, the average INDEX value was 0.84 in 2018 in people aged 15 years and older, while in the patient survey the median was 0.62 (IQR 0.48).[171] This indicates that the patient population targeted by our survey experienced more problems with health than the national representative sample. Moreover, important variables were lacking, such as disease burden, education, socio-economic status, in order to discuss our results. These variables cannot be collected because the Ethical committee did not allow us to collect such variables to avoid the identification of patients (e.g., for patients with rare diseases). Finally, the number of participants in the two surveys was overall not high enough to allow for robust analyses we hoped to perform on sub-territory scale (see supplement).

Given the abovementioned limitations, this snapshot of the maturity of IC and experience of care in Belgium must be considered as a first attempt from which lessons need to be learnt and should help to develop further studies through adapted study design.

4 STAKEHOLDERS’ PROPOSITIONS OF ACTIONS TO DEVELOP AND IMPLEMENT INTEGRATED CARE

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Key findings

- **Sixteen discussion groups with a total of 140 stakeholders were organised to map out facilitators and barriers for developing and implementing integrated care in Belgium. Those barriers and facilitators were used to identify actions to support the implementation of integrated care.**
- **The development of a long-term vision for integrated care, the support of physical and virtual networks between providers, the development of e-Health and data collection, and the involvement of both providers and patients in setting up integrated care, are all examples of facilitators identified by the surveyed stakeholders. Examples of barriers identified by stakeholders included the lack of coordination in the integrated care vision between federal and federated entities, the lack of data to support integrated care, the lack of legislative frameworks regulating governance, the financing system currently in place, the workforce needed to implement integrated care, and the potential resistance to change.**
- **Stakeholders proposed a large number of actions that were divided into 11 groups (super-clusters):**
  - **Activate patients as drivers of integrated care**
  - **Build skills and capacity for integrated care**
  - **Define and consolidate governance, roles, and responsibilities for integrated care**
  - **Develop a population-based approach**

- **Develop a vision of integrated care and build a platform for change**
- **Facilitate interprofessional, inter-organisational and intersectoral collaboration at micro- and meso- levels**
- **Improve access to and exchange of data and structure lines of communication**
- **Improve and streamline macro-level decision-making**
- **Nourish a culture of evaluation and quality-orientation**
- **Restructure funding for integrated care**
- **Strengthen the platform for learning and innovation**

- **There is more granularity when these are broken down into sub-clusters. The actions proposed in each of the sub-clusters have the merit of broadly addressing the different parts of the system. Although some general ideas emerged about actions to move integrated care forward, these different actions need to be defined in more concrete terms in order to proceed with their implementation.**
- **Due to the large number of proposed actions, implementation will need to be rolled out in phases. To this end, the creation of a transition pathway is recommended.**

4.1 Introduction

The research question in this chapter explores the obstacles and levers that exist in relation to integrated care in Belgium, and aims to identify actions. Multiple initiatives have been set up to achieve better integrated care (e.g., Integrated care projects[149], primary care zones in Flanders[150], SCUBY[151], CORTEXS-project[152], Vivel Academie[153], Protocol 3-projects[29]), but important is to identify the hurdles and opportunities.

To address this, online discussion groups were organised with stakeholders from Flanders, Brussels, and Wallonia. Ostbelgien which is geographically a part of the Walloon region has specific competencies regarding health care. However, as there was a project already underway which included stakeholder consultation in Ostbelgien, they were not included in this online discussion (see Box 2).

4.2 Methods

The online discussion groups were organised according to the different dimensions of the SCIROCCO model (see chapter 1) and took into account dimensions that the different stakeholders considered a priority (see section 3.1.3.5). During each discussion group, we addressed three different SCIROCCO dimensions, mapped out barriers, facilitators, and identified action points to tackle the identified barriers. The action points from these discussion groups will then form the starting point for the following research question in this project (see chapter 6).

Recruiting participants

People who completed the maturity assessment questionnaire (see section 3.1.2.1), were asked if they wanted to participate in these discussion groups. In total, we had 235 contact addresses of people who had expressed an interest in participating. Taking into account an expected response rate of 65%, which means approximately 150 participants, we were able to organise 16 discussion groups. We aimed for 8 to 10 participants per group. Discussion groups were organised per region resulting in 6 groups in Flanders, 6 in Wallonia and 4 in Brussels. We used a purposive sampling technique for each discussion group to ensure maximum diversity in professional profiles.

People were given one week to register and could choose which group they wanted to participate in. If a group was full, people were asked to sign up for another group. If all groups were full, or the remaining topics did not match the stakeholders' area of expertise, people could join a waiting list. Although registration was mainly organised on a first-come, first-served basis, some methods in place helped to set up a group with sufficient heterogeneity. Two different strategies were applied to guarantee sufficient heterogeneity in the groups. First, the registration links were sent out in a targeted manner (by region and by level of governance). The region was identified according to the location of the institution/organisation each stakeholder worked for. The level of governance was determined by following the same logic as in chapter 2, based on the institutions the stakeholders work for, and their profession. More details are available in the supplemental document. In each group, space was provided for 4 people working at the macro level (policy-makers) or meso level (support and governance in the local health system); 5 spots were reserved for people working at the micro level (interaction with patients). And one place was initially kept open and reserved to invite more people after the enrolment period ended, and to further optimise the heterogeneity of the group. The presence of people working at the different levels of care was taken into account, as well as the sector in which people were employed (e.g., presence of people working in the first and second line of care, welfare and health care), and the mix of different professions. Several people also joined the waiting list. To compensate for potential absences, we decided to increase the size of the groups so that everyone could participate in at least one discussion group. This is why the theoretical size of some groups may exceed 10 participants. In the case of participants with multiple responsibilities and functions, we retained their higher-level role: for example, if a health care provider was also a member of a professional association, they were considered for their macro-level work (i.e., working within a policy framework), not their micro-level work (i.e., patient interaction); similarly, if a general practitioner was also president of a primary care zone, they were considered meso-level participants (interaction at local health system level). The same classification logic as in Chapter 3 was followed (see supplement).

Data collection tool

The overall goal of this study phase was to formulate action points while considering all identified barriers and facilitators, which can stimulate the implementation of integrated care. The discussion groups were developed according to the different SCIROCCO dimensions. In each group, three dimensions were discussed. In Brussels, each dimension could be discussed once. In Flanders and Wallonia, the dimensions which were identified as priorities (as defined by the online maturity survey – see section 3.1.3.5), were included and discussed twice. In total, each dimension was discussed at least three times. Dimensions that were given higher priority were discussed a total of 4 or 5 times (see Table 35).

Table 35 – Number of times a SCIROCCO dimension was discussed per region

	Brussels	Flanders	Wallonia	Total
Breadth of ambition	1	2	2	5
Population approach	1	2	2	5
Citizen Empowerment	1	2	2	5
Structure and Governance	1	1	2	4
Digital infrastructure	1	2	1	4
Process coordination	1	2	2	5
Finance and Funding	1	2	2	5
Readiness to change	1	1	1	3
Removal of inhibitors	1	1	1	3
Evaluation methods	1	1	1	3
Innovation management	1	1	1	3
Capacity building	1	1	1	3

A few days before the discussion groups took place, participants received an email with the meeting details for the online meeting, and preparatory documents explaining the different dimensions that would be discussed. As a preliminary step to participating in the discussion group, participants were asked to list the barriers and facilitators to integrated care that they personally experienced in their line of work and as they pertained to the three dimensions that would be discussed.

The discussion groups were scheduled for two hours and consisted of three parts. The first part, the introduction, started with learning how to work with the online collaboration tool, 'Mural'. Afterwards, each participant briefly introduced themselves, followed by a short explanation about the framework of integrated care and the results of the online questionnaire on the maturity of integrated care. The second part focused on the perceived barriers and facilitators pertaining to the three dimensions discussed. It began with participants entering their own input into the digital collaboration tool. After harvesting the results of the different barriers and facilitators, the discussion facilitators grouped them thematically. The objective was to design an easier and more structured discussion afterwards. After discussing the various barriers and facilitators, participants were asked to indicate which items they felt were most important. Three bullet points allowed them to indicate their choices. These steps served as preparation for the third part. The objective of the third part was to formulate action points. Participants were asked to come up with concrete action points. These were then recorded in order to discuss them afterwards. Finally, the participants were asked to indicate what their priorities were, within those action points, in order to further develop and implement integrated care.

In some groups, due to lack of time, the exercise to prioritise barriers and facilitators and/or the exercise to prioritise actions was not completed or was shortened. Not all participants were able to indicate their priorities. This variable will be taken into account during analysis, but with caution, as it was not available in all discussion groups.

Methodological approach and data collection materials

Due to time constraints, the approaches proposed in participatory action research were used, including brainstorming and classification.[172, 173]

A collaborative digital board (Mural) was designed to facilitate exchange and allow participants to list and record ideas during individual time allotted for this purpose. At the end of the workshop, the Mural provided a written summary of what had been discussed during the workshop.

The different Murals were the body of evidence to carry out the analysis. The audio recordings of the different sessions were only used to clarify certain elements noted on the Murals.

Analysing barriers and facilitators

The purpose of formulating facilitators and barriers was to identify specific action points. Starting from reflections on how integrated care is currently progressing for a given dimension, we were able to facilitate the transition to outlining concrete action items. As an indication, the number of barriers and facilitators is presented by dimension. Depending on how it was formulated, the same item could be both a barrier or a facilitator (e.g., too little multidisciplinary collaboration vs. local initiatives that focus on multidisciplinary collaboration). Some barriers and facilitators are very generic and theoretical. They are not necessarily linked to anything that exists in the Belgian context (ex: bundle payment). Nevertheless, they are useful when we wanted to proceed with identifying action points.

During the discussion groups, barriers and facilitators were clustered and used to facilitate the discussions. No further analysis of the barriers and facilitators took place. Examples will be given, but these were selected randomly and are not based on an analysis.

Analysing and interpreting action points

Each action point is described in a short phrase. So, the whole collection of actions can be considered as a large set of short texts that lends itself appropriately to content analysis. The analysis aims to identify a relatively limited number of thematically homogeneous clusters of actions as an interim step to develop actionable policy recommendations for improving the maturity of integrated care in Belgium.

We relied on a combination of automated and manual analysis. Automated methods for short text analysis have developed rapidly in response to the desire to analyse texts originating from popular social media platforms. They can be of great help when analysts' time is scarce, as is the case in this research which is tied to an ambitious and stringent timeline. As described by Kasperiuniene et al., [156] we positioned automated content analysis as an interface between computer-assisted abstraction and analyst-led interpretation. The software used was developed by shiftN (Santiago Ortiz).

The core of the software is a Javascript framework (named Pulse), with two main areas: data (numeric and network analysis) and interactive visualisation. Using Javascript allows to share the tools and visualisations on the internet.

The automated clustering happened in three steps:

1. Building a network of texts based on similarity
    - Two texts are more or less similar if they use many of the same non-trivial words (trivial words, a.k.a. stop-words, such as “the”, “when”, “to”, “a”, etc., are removed from all the texts before analysis). The use of an infrequent word such as “resilience” or “infrastructure”, augments the proximity measure between two texts, especially if such words are infrequent in the remaining texts. Bigrams such as “integrated care” are also taken into account.
    - All pairs of texts are compared and their proximity is assessed. Pairs with greater similarity are used to generate a network of texts. A connection between two texts means that they have a considerable amount of common relevant words. If the number of selected pairs is large enough, each text of the corpus will be represented in at least one of the selected pairs. For 1,000 texts, a good number of pairs (connections) is 3,000. When building a network with a relation threshold function, the threshold is arbitrary. There are analytical ways to find a good threshold (for instance, finding a value in which a network becomes very dense, very quickly), but in this case the quality we want to maximise is human readability of the network. A network with 1,000 nodes and 3 relations per node, in average, is sufficiently good to carry enough information and link meaningful texts, while not being too dense and overwhelming. Another aspect we took into account was guaranteeing that two texts that were connected were, in general, by human standards, similar indeed. We felt that the used threshold could retain this quality.
2. Identifying clusters of texts
    - A cluster, or community, is a partition of the network (groups of nodes), where groups are selected for maximising connections within each group and minimising connections across groups. This is performed using the Louvain method [174].
3. Fine tuning to achieve a reasonable number of clusters
    - The main modifiable parameter in the process of extracting clusters is the number of connections in the network. Obtaining many connections results in few clusters, but they tend to lose their thematic cohesiveness. Inversely, having few connections leads to too many smaller clusters, which are more difficult to handle. The Louvain algorithm[174] cannot be tuned to find a specific number of clusters (as other clustering algorithms do, such as k-means[175]). One can increment or reduce the number of connections until the desired number of clusters is achieved (or an approximation).

The result of this algorithmic clustering is taken as the starting point for manual clustering. The manual clustering aims to homogenise and reduce the number of thematic clusters generated by the automated analysis by picking certain items from a given cluster and moving them to another cluster that is thematically a better fit. Framed as a qualitative analysis approach, the manual clustering can be seen as an instance of pattern coding[c].

The manual analysis was carried out by one single analyst (PV) who is familiar with the logic of the discussion group process. The stringent timeline did not allow for a cross-check via independent re-clustering by a second analyst (ASL). However, when writing the results, a second analyst reviewed all clusters. Some modifications were then introduced after discussion within the team to work towards a consensus (PV, ASL, SODB, JM, DH) to make the clustering even more readable.

The result of this manual procedure was a set of thematic clusters, identified as ‘clusters’ and 'sub-clusters'. Each cluster or sub-cluster is identified by a label that expresses the underlying idea expressed as an action. For instance, "Create a framework for secure data sharing", or "Develop financial incentives for integration of care". This still relatively large number of sub-clusters is then further grouped into a number of clusters, themselves grouped into a limited number of 'super-clusters'. At this point in the analysis there were four levels of granularity to work with on the action-related data from the discussion groups: highly granular level by inspecting the separate suggestions for actions, medium-high granular level by working with the sub-clusters, medium-low level by working with the clusters identified as a result of a combined automated and manual analysis, and coarse level by considering the super-clusters.

These 4 levels of granularity were shown in a dynamic table that allows researchers to navigate between these different levels. In this table, the actions were colour-coded by region with the intensity of the colour corresponding to the level of priority given to the action by the stakeholders. The level of priority that has not been achieved in the same way in the different groups is weighted according to the number of priorities assigned within each group. Specifically, each participant was asked to place 3 stickers: 1 corresponding to priority 1, 2 to priority 2, and 3 to priority 3. The stickers on each action were first inverted (priority 1 corresponding to value 3, priority 2 to value 2 and priority 3 to value 1) and then added up. For each discussion group, the sum of the priority scores was calculated (in some groups only 3 participants did the exercise, while in others all 9 participants positioned their priorities). The priority value of each action was then divided by the sum of all priorities in the group. This information sometimes helped the researchers choose the actions to present. However, given the great variability in the way the exercise was carried out in the different groups, the researchers preferred not to focus solely on this information. Therefore, read through all the proposed actions and presented at least the first three levels of granularity for each type of action. Finally, the different super-clusters were organised using an activity model called the Viable Systems Model (VSM). This model, proposed by Stafford Beer, offers a generic description of an adaptive system[176-178]. The VSM model was used to structure the reporting and the analysis of action points grouped in super-clusters.

4.3 Results

4.3.1 Discussion group participants

A total of 140 stakeholders participated in the 16 discussion groups. The ‘no show’ rate was limited, ranging from 0 to 3 per group. The discussion groups were diverse in composition. Table 36 shows the categorisation of the participants. In an attempt to categorise each participant to only 1 sector, it is important to note that some had multiple functions (for example a doctor also working in an organisation for home care was categorised as a doctor in a primary care structure). No other respondent characteristics were retrieved.

Table 36 – Participant characteristics, by region

Professional sector	Flanders	Brussels	Wallonia
Public services, Public institutions (e.g. FOD, Aviq, VIVEL, Brusano)	7	9	12
Patient representatives	4	2	
Physicians	1	1	2
Pilot projects integrated care	5		3
Home nursing and family care (organisations and networks)	6	6	12
Primary care (eerstelijnszone, platforme de la premier ligne)	6		2
Mental Health care	3	3	1
Elderly care	4		1
Hospital	5		2
Pharmacist	2	1	2
Revalidation	1		
Social care (social assistant)	1		1
Researcher (universities, KBS,…)	5	2	4
Sickness funds (insurance)	2	5	
Community health centre		4	3
Prevention		2	3
Paramedics (Dietician, physiotherapist,…)	1		3
Palliative care			1

For participants from Flanders and Wallonia, there were 6 discussion groups organised, whereas there were 4 groups organised for the Brussels participants.

4.3.2 Facilitators & barriers

A total of 883 barriers and 681 facilitators were proposed. The three topics around which we gathered the most input were ‘Citizen empowerment’, ‘Removal of inhibitors’ and ‘Readiness to change’. ‘Citizen empowerment’ holds the most facilitators and the ‘removal of inhibitors’, the most barriers. Proportionally, more facilitators than barriers were identified for seven of the twelve dimensions.

The dimensions where participants identified more barriers—meaning they approached the dimensions more from a negative perspective—were ‘Structure & Governance’, ‘Digital infrastructure’, ‘Process coordination’, ‘Readiness to change’ and ‘Innovation management’. In Brussels, most of the input collected was on the ‘Citizen empowerment’ dimension; in Flanders, most of the input gathered was on ‘Removal of inhibitors’, and in Wallonia, on ‘Capacity building’ (see Table 37).

Table 37 – Number of Facilitators & barriers identified by SCIROCCO dimensions

	Brussels		Flanders		Wallonia		Total	
	Facilitator (n=195)	Barrier (n=214)	Facilitator (n=300)	Barrier (n=419)	Facilitator (n=186)	Barrier (n=250)	Facilitator (n=681)	Barrier (n=883)
Breadth of ambition	5	9	37	39	20	27	62	75
Population approach	17	21	14	16	9	8	40	45
Citizen empowerment	33	30	44	48	31	30	108	108
Structure & Governance	21	30	16	47	11	18	48	95
Digital infrastructure	7	10	10	15	5	10	22	34
Process coordination	16	12	25	55	11	34	52	101
Finance & Funding	6	5	19	29	11	8	36	42
Readiness to change	20	30	42	52	12	21	74	103
Removal of inhibitors	22	20	53	65	18	32	93	117
Evaluation methods	28	19	13	13	6	14	47	46
Innovation management	4	14	5	13	22	15	31	42
Capacity building	16	14	22	28	30	33	68	75

Across the different dimensions, several elements stand out regularly. These include the importance of cooperation, financing, the division of competences, the importance of a shared patient record, etc. To give an idea of the different issues that were discussed, table 38 provides some input regarding each dimension (see Table 38). These examples have been selected at random and only serve the purpose of giving an indication of what was discussed. This table is therefore incomplete, both in terms of different topics discussed and depth of topics. Moreover, some topics are specific to the Belgian context while others stem from the expertise of stakeholders based on international examples and are therefore *opportunities* rather than effective facilitators at this time.

Table 38 – Examples of facilitators and barriers

Dimensions	Facilitators	Barriers
Breadth of ambition	Bottom-up approach, mapping of the different initiatives around cooperation, neighbourhood-oriented care, financing of care coordination at patient level, new generation of care providers open to cooperation and new forms of care, ...	Staff shortages, poor cooperation and lack of knowledge about one another, too supply-driven, inappropriate financing, existing framework of nomenclature codes hinders innovative actions, low connectivity among primary care providers, no transmural care trajectories between first and second line of care, ...
Population approach	Regional and federal political amenability, Covid vaccination experiences, recent initiatives to develop dashboards, creation of 'population manager' role (someone who follows up on the data collection and analyses), learning network, neighbourhood care teams and welfare providers, available databases, ...	Lack of recent data, lack of data on well-being, little data available at neighbourhood level, no culture or tradition of a population-approach concept, populations at risk are not identified as such, lack of trained staff, lack of funding, GDPR, unclear responsibilities, rigid patient consent, ...
Citizen empowerment	Patient involvement in basic and continuing education, open communication, case managers, involving patient organisations in decision-making processes, giving patients access to their medical records, promote goal-oriented care to all professionals, peer support, e-Health training to improve digital health literacy, ...	Low health literacy, need for attitude/culture change among care providers and patients, digital gap, unclear healthcare landscape for patients, lack of adapted communication, lack of time by professionals, high level of difficulty for vulnerable groups (poverty, multiculturalism), caregivers do not always have a (financial) interest in promoting autonomy, top-down caregiver culture, ...
Structure & Governance	Bottom-up initiatives, desire from stakeholders to participate in reflection process, plan for change management, fund monitoring and results, geographical harmonisation, involving experts by experience, pilot projects for new governance structure, ...	Competencies shared between federal and federated entities, Brussels' constitutional complexity and division of powers, organisations' fear of/resistance to change, unclear vision from government, link between local authorities and first line of care, fear of losing funding, lobbying, ...
Digital infrastructure	Several projects show that data sharing is possible, field-wide willingness to share data, digital multidisciplinary consultation, e-Health roadmap, COVID has accelerated digital cooperation, ...	Different registration systems for health care providers, lack of standards, fragmentation of competencies, GDPR, sectoral conservatism, lack of a single digital file, platforms not always compatible, access to tools, no current system to support integrated care, lack of digital literacy, ...
Process coordination	Moments of shared vision and training, guidelines in place with room to adapt to context, developing synergy between the first-line carers and hospital, co-creation of processes with stakeholders, remuneration of coordination time, strengthening	Conflicts of interests among health care providers, insufficient field-level knowledge about this concept, lack of interoperable information sharing system, definitions are still unclear, lack of coherence between federal and regional projects, task-oriented rather than goal-oriented care, too

	multidisciplinary work, working group in first-line zone on multidisciplinary collaboration, ...	many initiatives in different areas and no coordination, insufficient time for care coordination and consultation, ...
Finance & Funding	Multi-year trajectory budget NIHDI: long-term vision andmonitoring integrated care and mental health care, co-construct monitoring indicators, time extension for submitting subsidy applications for integrated care projects, rewarding quality, funded integrated care projects, care trajectories, population funding, bundled payment, ...	Lack of a long-term vision, lack of alignment between policy levels, limited budget for health and welfare, nomenclature reform, difficulty testing different funding methods, administrative burden to release funding, federal funding for health professionals, non-structural funding, imbalance between hospital and first-line care, poor support for primary care zones, ...
Readiness to change	Ambition to renew inter-federal plan on integrated care, good practice sharing, listening and responding to professionals' fears/concerns, political will, awareness-raising actions, investing in training and education, ...	Need for patient awareness, willingness to change is limited, little communication on the benefits of integrated care for patients and professionals, fear of the unknown, hierarchical system, policies made by lobbying circuits, change takes time and does not always equate to savings at first, ...
Removal of inhibitors	Peer helpers, electronic patient records, network support, coaching, people who facilitate change, invest in clear communication, dissemination of information via newsletters, sharing good practices, benchmarking as incentive to learn from each other, a person responsible for integrated care within the hospital, breaking down the barriers between disciplines, ...	Numerous legal obstacles make interdisciplinary cooperation impossible or force cooperation in legal grey zone, state reform, need for meso/macro-level vision and understanding of the global system, little attention to this in health provider training, lack of budget push towards hiring people who are too young and inexperienced, ...
Evaluation methods	Evaluation of processes not just results, evaluation initiatives at project level, organising patient survey, working towards specifically defined health targets, patient participation across all phases of evaluation, ...	Often complex and fragmented evaluation methods, little or no communication between different actors, many actions cannot always be evaluated, no attention to evaluation method at the start of the project, benchmarking, often slow return on investment, lack of time, fear of peer judgment, ...
Innovation management	Health in all policies, drawing on successful models from abroad, increased use of digital tools due to COVID, shared vision across pilot projects, knowledge and good practice sharing, ...	Too many small projects instead of one vision for a future plan, no room for experimentation in legislation, legal barriers between the various care professions, lack of dashboards to do proper self-assessments, competition between networks, ...
Capacity building	Providing interdisciplinary training, some professionals highly motivated, co-creating and developing care pathways, continuous training, redesigning health professions to meet a broader framework of well-being, ...	Lack of cultural competence, lack of mental health competence, education not sufficiently aligned with field work, lack of focus on transmural care during training, danger of creating too many new roles and positions, no cross-sectoral vision, ...

4.3.3 *Action points*

4.3.3.1 *Classification of actions*

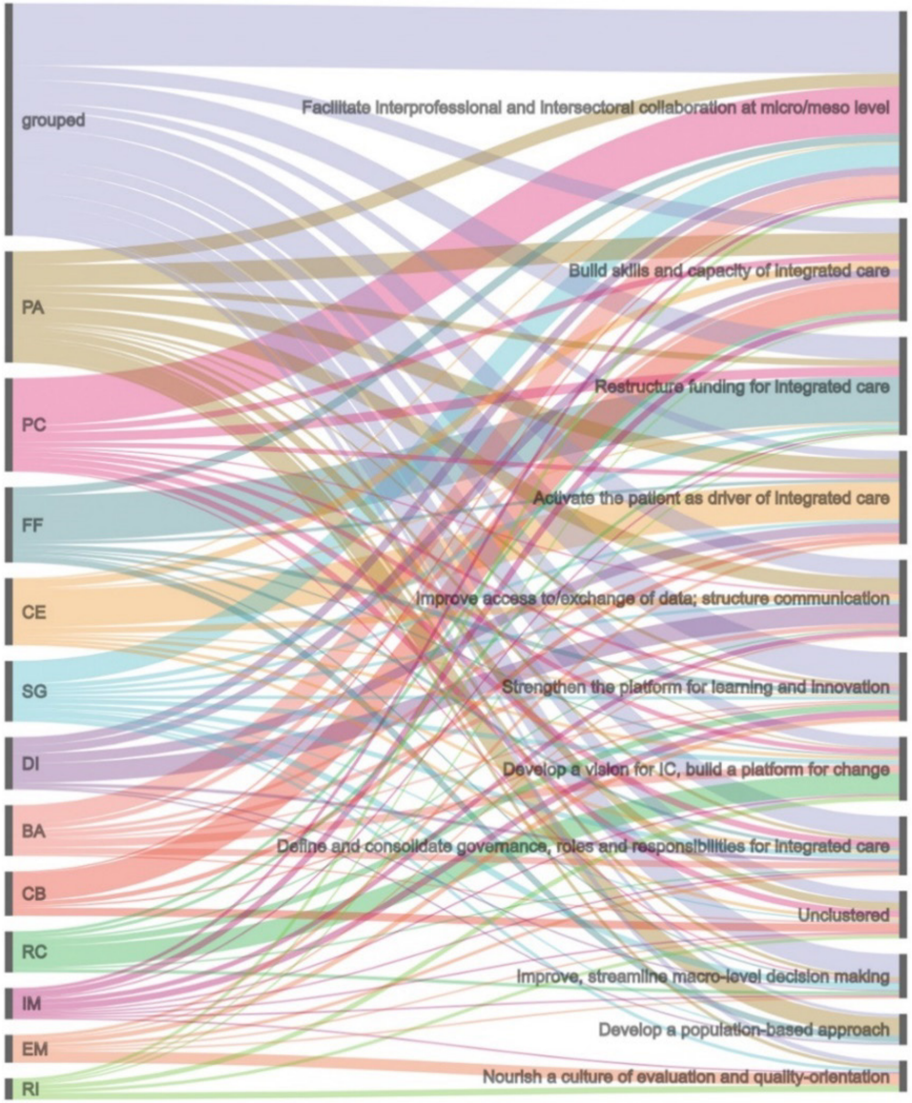
In the discussion groups, participants were invited to propose actions related to a particular dimension, or actions that cut across the three dimensions discussed in the workshop. In total, 555 actions points were proposed. A quarter of the proposed actions are transversal actions and can be linked to several SCIROCCO dimensions (see Table 39). It seems that the most concrete dimensions (e.g., "Population approach", "Process coordination", "Finance & Funding", "Citizen empowerment"), are the dimensions for which more actions were proposed. However, the difference in proportion with the less concrete actions (such as "Removals of inhibitors", "Innovation management", etc.) is difficult to quantify as these dimensions were not focused on as much during the discussion groups.

Table 39 – Actions identified by dimension

	Brussels (n = 114)	Flanders (n = 232)	Wallonia (n = 209)	Total (n = 555)
Breadth of ambition	7	15	9	31
Population approach	11	25	32	68
Citizen empowerment	13	16	12	41
Structure & Governance	6	11	20	37
Digital infrastructure	6	18	8	32
Process coordination	11	20	26	57
Finance & Funding	5	23	18	46
Readiness to change	8	9	8	25
Removal of inhibitors	3	3	7	13
Evaluation methods	4	8	5	17
Innovation management	4	8	7	19
Capacity building	8	11	8	27
Multiple dimensions	28	65	49	142

The actions from the different discussion groups were grouped into 12 clusters (called super-clusters). This is the result of automated and manual clustering. This clustering consists of four levels of granularity (Super-cluster, cluster, sub-cluster and actions). As shown in Figure 11, the super-clusters (first level of granularity) do not match original dimensions accurately, with the exception of some (e.g. “Process coordination” which matches well with the super-cluster “Facilitate interprofessional and intersectoral collaboration at micro/meso level”, or, “Finance & Funding” which matches the super-cluster “Restructure funding for integrated care”, and “Citizen empowerment” which matches the super-cluster “Activate the patient as a driver of integrated care”). In the other dimensions, we notice a greater diversity, meaning that the actions are more spread out among the different super-cluster.

Figure 11 – Link between SCIROCCO dimensions and super-clusters



Legend: Grouped = transversal actions proposed without being attached to a specific cluster; PA = Population-based approach; PC = Process Coordination; FF = Finance & Funding; CE = Citizen Empowerment; SG = Structure & Governance; DI = Digital Infrastructure; BA = Breadth of Ambition; CB = Capacity Building; RC = Readiness to Change; IM = Innovation Management; EM = Evaluation Methods; RI = Removal of Inhibitors.

A more detailed view of this figure can be found on the KCE webpage of this report.

Table 40 shows the super-clusters which group all the actions proposed during the discussion groups into twelve categories. Only 29 of the 555 actions could not be classified under these super-clusters. The super-cluster “Facilitate interprofessional and intersectoral collaboration at the micro/meso level" grouped 124 of the proposed actions. The super-clusters "Activate the patient as driver of integrated care", “Building skills and capacity for integrated care”, and “Restructure funding for integrated care” each account for about 10% (~60) of the proposed actions. Super-clusters are fairly homogeneously represented across regions (with some variations). The super-clusters "Activate the patient as driver of integrated care" and "Develop a vision for IC, build a platform for change" were discussed more in depth in the Brussels groups (i.e. higher percentage of actions per region for these super-clusters). The super-clusters "Improve access to/exchange of data, structure communication" and "Strengthen the platform for learning and innovation" were discussed more in depth in the Flemish groups (i.e. a higher percentage of actions per region for these super-clusters). Finally, the super-cluster "Facilitate interprofessional and intersectoral collaboration at the micro/meso level" was the topic most discussed overall (>20% of the actions in total) and was most discussed in the Walloon groups.

Table 40 – Number of actions identified by super-clusters

	Brussels (n = 114)	Flanders (n = 232)	Wallonia (n = 209)	Total (n = 555)
Activate the patient as driver of integrated care	16	23	18	57
Build skills and capacity for integrated care	12	20	24	56
Define and consolidate governance, roles and responsibilities for integrated care	6	16	14	36
Develop a population-based approach	5	8	6	19
Develop a vision for IC, build a platform for change	11	12	16	39
Facilitate interprofessional and intersectoral collaboration at micro/meso level	21	48	55	124
Improve access to/exchange of data, structure communication	7	23	17	47
Improve, streamline macro-level decision-making	7	12	8	27
Feed a culture of evaluation and quality-orientation	5	6	8	19
Restructure funding for integrated care	11	28	21	60
Strengthen the platform for learning and innovation	4	24	14	42
Unclustered	9	12	8	29

4.3.3.2 Viable Systems Model conceptual framework

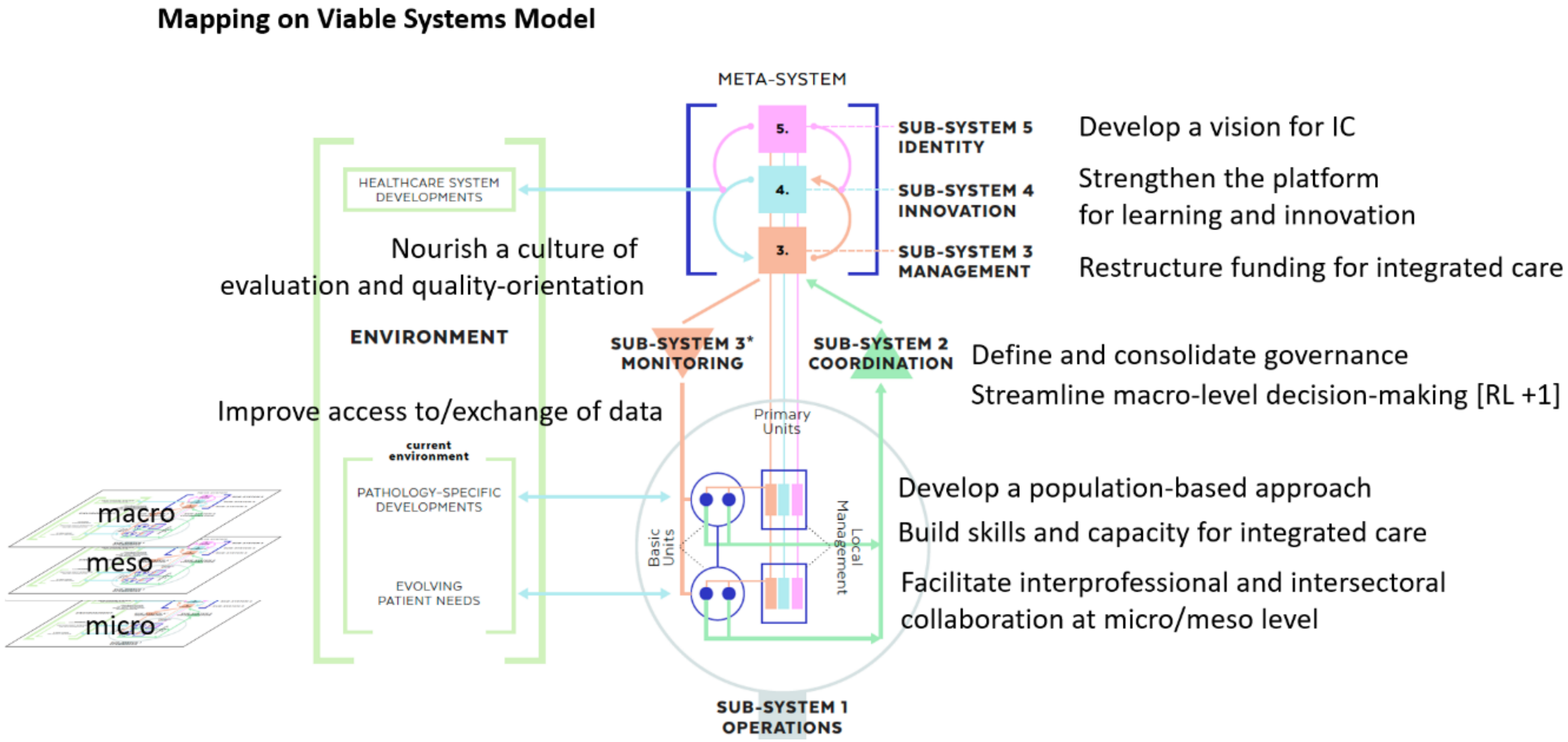
The whole collection of actions makes sense of considered as an interconnected set that drives transition towards integrated care, which activates a coherent collection of functions (articulated at the level of super-clusters) across the patient interaction level (micro level), the support and governance level of the local health system[d] (meso level), and the policy framework level (macro level) (see Figure 12).

This systemic set consists of three main elements: Operations, Metasystem and Environment. Here, we provide an overview of the systemic engine. Each system will then be detailed and illustrated using the actions proposed by the participants in the discussion groups.

- **Operations (S1):** This is the level where integrated care is operationalised across primary activities performed by the system. Operationalising integrated care requires connecting four types of actions: (1) actions that facilitate interprofessional and intersectoral collaboration at the micro and meso levels, (2) actions that enable actors to develop skills and capacity for integrated care, (3) actions that enable the development of a population-based approach, and (4) actions that allow to activate the patient as the driver of integrated care. This operationalisation, therefore, requires a combination of actions at three levels (patient interaction, support and governance of local health system, and policy framework).
- The **Metasystem** groups activities which ensure that the various Operational units work together in an integrated and harmonious way. This is divided into five interconnected modules: Conflict resolution / Coordination (S2), Management (S3), Monitoring (S3*), Innovation (S4) and Identity function (S5).
- **The Conflict resolution / Coordination function (S2)** should allow the operationalisation of activities proposed in module S1 in a greenhouse atmosphere. The activities are therefore linked to (1) the way governance is defined and consolidated and (2) the way decisions are taken. These activities concern the meso and macro levels.

- **The Management function (S3)** proposes activities which aim to regulate the Operations system, determine its performance levels, and decide on resources to achieve the desired level of performance. These include, among others, activities linked to modalities of financing and how they support the development of integrated care.
- **The Monitoring function (S3*)** consists of activities that monitor the Operations activities to help the Management function perform its control function. It is therefore a question of improving access to data and extending its access so that it can be used to compile data at the population level based on individual data. This population data, presented in the form of a dashboard, can then be used to support decision-making actions and management. It is also the set of activities that will feed a culture of evaluation and quality-orientation.
- **The Innovation function (S4)** includes activities that will allow learning about the existing system and making adaptations and modifications to operational and management activities. These are therefore the activities that allow to strengthen the learning and innovation system.

Figure 12 – VSM mapping



1. Operation

- **Actions that facilitate interprofessional and intersectoral collaboration at the micro and meso levels**

The actions proposed by the participants that facilitate interprofessional and intersectoral collaboration at the micro and meso level, are divided into four clusters and 17 sub-clusters (see Table 41).

The first cluster proposed actions that would facilitate interprofessional and intersectoral collaboration during interactions with the patient. This involved facilitating multidisciplinary consultation at the micro level (1) by carrying out a joint assessment of the patient at the beginning of the treatment, (2) by involving certain professionals in the consultations, such as pharmacists, (3) by working on processes for validating remote meetings, (4) by proposing virtual meetings to have all the stakeholders around the table, (5) by facilitating information-sharing between stakeholders or (6) by extending the possibilities to fund multidisciplinary meetings with the patients. The concern was also to optimise certain existing structures/functions (such as coordination centres) and redefine others (such as case management roles). The participants also spoke about the benefit of roles that would decompartmentalise care areas (e.g., a ‘super’ case manager who would navigate between the different living areas such as homes, hospitals or nursing homes, during patient transfers).

The second cluster proposed actions aimed at structuring and strengthening the first line of care. The realities, here, were different from one region to another. For example, in the Brussels and Walloon groups, participants talked about organising a consultation of primary care actors to define territories on an intersectoral basis and in co-construction with the different actors. In the Flemish groups, participants talked about strengthening the primary care zones, among other things, by giving them the time and financial and human resources to grow and develop. Participants also suggested establishing a unique contact point for citizens, so that they can be referred and get the correct first-hand information about available services (care and support options), useful information (e.g., health promotion awareness), information on how to file a complaint, etc. In the Brussels groups, the preoccupation was also to build on what exists and not create new structures or organisations unnecessarily.

The third cluster proposed actions aimed at strengthening the link between primary and secondary care. The participants pointed out the importance of developing intersectoral and transmural care pathways. They suggested thinking of pathways that address more than one disease and that also take into consideration the psychosocial aspects and well-being. In order to integrate the first and second lines of care in this way, the participants proposed having more spaces / opportunities dedicated to exchanging between lines of care and developing a digital tool allowing the sharing of information between the different care locations. Integration between care lines also requires, according to the participants, connecting the territorial logic of primary care with the territorial logic of the secondary and tertiary care (e.g., hospital networks). They proposed defining territories that would be wider than primary care territories, and which would be responsible for the development of integrated care.

In order to succeed in putting this in place, in a fourth cluster, participants stressed the importance of building trust and knowing/understanding each other’s roles in local networks. These networks would be made up of health and social actors (with the aim of integrating the health, social and welfare sectors) and also include local authorities. Participants proposed, for example, to create dedicated spaces for providers working in the same primary health care area to exchange amongst themselves. The participants also proposed that there should be spaces for exchanges in the territories responsible for the development of integrated care (territories that group together several primary health care territories), for example, between coordinators of primary health care territories. Finally, according to the participants, building trust within the network requires a better mutual understanding of each other's roles and responsibilities (this action is included in the sub-cluster “Map available assets and actors”). The starting point of the network is therefore to make visible what is invisible by mapping the existing situation.

Table 41 – Description of the Super-cluster “Facilitate interprofessional and intersectoral collaboration at the micro/meso levels”

Clusters	Sub-clusters	Brussels (n = 21) (n)	Flanders (n = 48) (n)	Wallonia (n = 55) (n)	Total (n = 124) (n)
Actions to facilitate interprofessional and intersectoral collaboration during the interaction with the patient	Define and support case management	2	2	3	7
	Expand access to patient info/digital tools for all health care and welfare professionals	1	3	3	7
	Facilitate multidisciplinary consultation at micro level	1	3	12	16
	Formalise care and support pools	1	1	0	2
	Leverage coordination centres (centre de coordination d'aide et de soins à domicile)	0	0	2	2
	Sum	5	9	20	34
Actions to structure and strengthen the first line of care	Create one access point for patients, citizens	0	2	0	2
	Define territories	0	1	6	7
	Integrate health care and welfare	6	4	1	11
	Strengthen primary care zones	0	3	0	3
	Structure and strengthen first line care	0	4	2	6
	Sum	6	14	9	29
Actions to strengthen link between first and second lines care	Create care pathways for integrated care	0	5	0	5
	Improve coordination of transition points in the care process	2	3	2	7
	Integrate first and second line	1	1	5	7
	Sum	3	9	7	19
Actions to build trust and know one another’s roles in local networks	Implement a neighbourhood care approach	1	3	0	4
	Map available assets and actors	3	1	3	7
	Partner with local authorities	3	8	10	21
	Stimulate, support regional collaboration	0	4	6	10
	Sum	7	16	19	42

- **Actions that enable actors to develop skills and capacity for integrated care**

Actions proposed by the participants that enable actors to develop skills and capacity were divided into 3 clusters and 10 sub-clusters (see Table 42).

The first cluster grouped activities which aimed to extend/restructure the basic training of professionals. The propositions included new themes and skills relating to multidisciplinary work, integrated care, health literacy, patient education, internships (throughout a patient's entire care cycle through various types of care, instead of internships on one single discipline), etc. It was suggested that training also include courses or group work that would make it possible to combine several disciplines (e.g., drug review).

The participants in the discussion groups also recommended stimulating the continuous development of professionals. To do this, they suggested (1) broadening the range of training courses and including topics such as population approach, change management, multidisciplinary collaboration, communication with patients, multiculturality, etc., (2) improving communication about training courses available (e.g., developing a digital platform that references the various training courses), (3) organising interprofessional trainings (which would directly create spaces to get to know one another), (4) proposing training courses specific to particular roles (directed at case managers, for example), and (5) thinking about a budget for continuing educations/training and supporting a compulsory training system.

Finally, the participants in the discussion groups pointed out the importance of having spaces to exchange good practices, to get to know one another and gain better understand of one another's skills.

Table 42 – Description of the Super-cluster “Build skills and capacity for integrated care”

Clusters	Sub-clusters	Brussels (n = 12) (n)	Flanders (n = 20) (n)	Wallonia (n = 24) (n)	Total (n = 56) (n)
Actions to extent/restructure basic training of professionals	Expand/restructure basic training of professionals	5	8	9	22
	Sum	5	8	9	22
Actions to stimulate continuous development of professionals	Broaden access to existing training offer	1	0	3	4
	Deepen skills in multidisciplinary collaboration	2	3	3	8
	Deepen skills in population approach	1	4	1	6
	Develop skills in change management	0	0	2	2
	Develop skills in goal-oriented care	0	2	0	2
	Increase data/digital literacy of professionals	1	0	2	3
	Stimulate continuous professional development	1	0	2	3
	Sum	6	9	13	28
Actions to strengthen peer learning	Strengthen peer learning/Build community of practices	1	3	2	6
	Sum	1	3	2	6

- **Actions that enable the development of a population approach**

The participants put forward various elements that should enable the development of a population-based approach (see Table 43). First, they pointed out the importance of opening access to available databases for the use of population health management. They underlined the need to think/develop relevant indicators for population management. They proposed to think through this approach by territory, and to create/reinforce a new role to promote the population approach at the territory level. Finally, they proposed to make the network responsible for supporting the population living in its territory, restructuring the organisation of care, and providing population-based funding.

Participants also pointed out the need to focus more on prevention and have a **proactive approach towards the population**. They suggested providing financial incentives for prevention work.

Table 43 – Description of the Super-cluster "Develop a population-based approach"

Clusters	Brussels (n = 5) (n)	Flanders (n = 8) (n)	Wallonia (n = 6) (n)	Total (n = 19) (n)
Actions to develop a population-based approach	4	5	5	14
Actions to develop a proactive approach towards population	1	3	1	5

- **Actions that allow to activate the patient as a driver of integrated care**

Actions proposed by participants, that allow to activate the patient as a driver of integrated care were grouped into four clusters and nine sub-clusters (see Table 44).

First, the objective was to guarantee equity and affordability for all patients (cluster) by enforcing and promoting patients' rights. Ensuring equity and accessibility means resolving the issue of having equitable initiatives in terms of access for all. This means providing digital access to patients and finding solutions to overcome the digital divide (e.g., training supported by the municipalities, using neighbourhood solidarity initiatives to support people who are not fluent in digital access, ensuring that tools are user-friendly and understandable, etc.).

Second, participants underlined the importance of putting the patient/citizen back at the centre of their care, by strengthening patient self-management (e.g., by developing the role of a referent, and coordination around self-management with carers and patients), and by offering goal-oriented care.

Patients also have a role to play in identifying needs (personal and collective), in sharing their experience of care (e.g., as *experts* by experience). They should be more involved in strategic discussions and decision-making (e.g., steering committee, hospital committees, implementation of new projects, etc.).

Finally, the participants also suggested strengthening health literacy, starting as early as kindergarten. They also pointed out the importance of communicating in a contextualised manner, on issues relating to health and its determinants, and saw this as a collective responsibility (professionals' and government's).

Table 44 – Description of the super-cluster "Activate the patient as driver of integrated care"

Clusters	Sub-clusters	Brussels (n = 16) (n)	Flanders (n = 23) (n)	Wallonia (n = 18) (n)	Total (n = 57) (n)
Actions to assure equity and affordability for all patients	Assure equity and affordability for all patients	3	2	0	5
	Provide digital access to patients /minimise impact of digital gap	4	4	5	13
	Sum	7	6	5	18
Actions to build on patients' expertise	Involve experts by experience	1	4	1	6
	Involve patients in detecting personal and collective needs	1	2	2	5
	Involve patients in strategic conversations	1	1	6	8
	Sum	3	7	9	19

Actions to put the person back at the centre of care	Promote goal-oriented care	2	5	0	7
	Strengthen patient self-management	1	2	0	3
	Sum	3	7	0	10
Actions to strengthen health literacy	Develop health literacy	2	1	3	6
	Strengthen organisational health literacy	1	2	1	4
	Sum	3	3	4	10

2. Metasystem

- **Conflict resolution / Coordination function**

The activities linked to Conflict resolution/coordination first included the way governance is defined and consolidated. These actions were divided into 6 clusters (see Table 45).

Thirteen of the in total 36 actions proposed concern the definition of mandates and objectives (cluster). The need for a definition of mandates and objectives occurs at two levels: policy-makers and the local health systems (meso).

First, the participants pointed out the need to define the division of competences between the different levels of authority (macro level) so it becomes clear for the professionals and patients where and who they should turn to. This point is a particular priority for participants in the Brussels groups and is explained by the highly complex institutional landscape in Brussels. At the level of local health systems, participants suggested defining the objectives and responsibilities of the different structures, and thinking about agreements on how to work better together. They also spoke of the need to establish a clear competence profile for certain roles (e.g., case manager versus home care coordinator). As explained in a previous paragraph, this action is also essential to facilitate interprofessional collaboration at the patient interaction level.

In order to build a common governance, the participants highlighted the importance of defining a common goal of integrated care (which is intrinsically linked to the finality of care) and defining the objectives for change. This common vision should then be translated into a clear implementation plan with concrete actions. The development of common governance at the level of local health systems could, according to the participants, be facilitated by the creation of new roles (e.g., Change Advisors, Network/Territory Coaches). Some participants, however, pointed out their concern about adding new care professionals to the field which could make it more complex. They insisted that it is possible to assign new responsibilities to existing roles.

The participants also identified the need to define standardised approaches for the implementation of integrated care. These approaches concern methodological aspects, data usage, tools supporting interdisciplinary work and coordination, etc.

Finally, they suggested reducing the administrative burden by pooling resources, among other suggestions, in order to have more time for the delivery of care.

Table 45 – Description Super-cluster "Define and consolidate governance, roles and responsibilities for integrated care"

Clusters	Brussels (n = 6) (n)	Flanders (n = 16) (n)	Wallonia (n = 14) (n)	Total (n = 36) (n)
Define finality of care	1	1	3	5
Define mandates and objectives	2	6	5	13
Design and define new roles	0	0	3	3
Develop a clear implementation plan	1	3	1	5
Reduce administrative burden, enhance efficiency	1	2	1	4
Standardise integrated care approaches	1	4	1	6

Second, the activities linked to Conflict resolution / coordination revolved around the way decisions are taken at the macro-level (see Table 46).

Participants formulated several actions touching on a better alignment between the different institutional levels (federal and federated entities). They spoke about creating an inter-federal plan and adding governance to it: the federal, regional and local authorities together, would support local-regional action plans. The inter-federal plan must therefore redefine and align the roles of the different levels of authority. Some participants talked about streamlining the macro institutional landscape (and division of powers) to reduce fragmentation and facilitate innovation (as well as the option to re-federate and re-create the province of Brabant).

Participants also suggested increasing the effectiveness of decision-making at the macro level, by creating, for example, a permanent inter-ministerial conference or by revising the consultation model for macro decision-making.

Finally, participants proposed to see new policies developed in consultation with stakeholders (for the conception and implementation of policies). In the Walloon groups, participants suggested starting the "Assises de la première ligne". Participants also talked about conducting a society-wide citizen's debate based, for example, on Integrated care projects.

Table 46 – Description Super-cluster "Improve, streamline macro-level decision making"

Clusters	Brussels (n = 7) (n)	Flanders (n = 12) (n)	Wallonia (n = 8) (n)	Total (n = 27) (n)
Develop new policies with stakeholders	1	2	2	5
Increase efficiency of macro level decision making	2	0	1	3
Provide feedback to policy makers	0	1	3	4
Streamline macro institutional landscape (and division of powers)	1	3	1	5
Strengthen alignment between inter-federal entities	3	6	1	10

- **Management function**

Actions linked to Management function allow to regulate Operations. These include actions to restructure funding for integrated care, among others. These actions were divided into three clusters and seven sub-clusters (see Table 47).

First, financing interprofessional and intersectoral work at the patient interaction level (micro). The participants talked about (1) valuing/re-assessing Multidisciplinary collaboration, by financing moments of exchange and coordination of practices, (2) supporting multidisciplinary meetings, and (3) financing community health activities (e.g., through neighbourhood approach). Participants also suggested that governance be financed at the local health system level (meso level). This is further discussed in chapter 6.

Additionally, participants mentioned the need to diversify funding mechanisms and think of funding modalities that support the integration of care. The objective is to move away from a strictly volume-based funding model and include other financing modalities such as: bundled payment, the

Cappuccino model, etc. These new funding models must, according to some participants, be field-tested first (e.g., by testing certain funding models in pilot projects). Then, it will be important to allow for a certain level of funding flexibility in order to transition from one model to another.

Finally, participants recognised the importance of developing a long-term vision for funding and allowing time to demonstrate the return on investment.

They also pointed to the importance of a paradigm shift. Health should not be considered an expense. It should be about using the best available resources and potentially re-allocating existing funds in order to make it as equitable as possible.

Table 47 – Description Super-cluster "Restructure funding for integrated care"

Clusters	Sub-clusters	Brussels (n = 11) (n)	Flanders (n = 28) (n)	Wallonia (n = 21) (n)	Total (n = 60) (n)
Actions to develop common, long-term vision for funding	Develop long-term funding approach	1	2	3	6
	Improve coherence of federal and regional funding	2	0	1	3
	Reallocate existing funding	0	3	0	3
	Sum	3	5	4	12
Actions to finance interprofessional and intersectoral work at the level of patient interaction	Finance coordination activities	3	5	8	16
	Sum	3	5	8	16
Actions to think of funding modalities that support integration of care	Develop financial incentives for integration	2	2	2	6
	Diversify funding mechanisms	2	14	3	19
	Provide adequate funding	1	2	4	7
	Sum	5	18	9	32

- **Monitoring function**

First, actions linked to the Monitoring function included a set of activities that would nourish a culture of evaluation and quality-orientation. This involves:

- Drawing lessons from previous evaluations, in terms of choosing the indicators to monitor change in the short-, medium- and long-term
- Evaluating what is already working
- Supporting stakeholders in carrying out evaluations by (1) developing mobile support teams, (2) developing tools for self-evaluation, or (3) developing general recommendations of evaluations that should be carried out in a similar way, although adaptable to individual projects.
- Providing the time and space to install a sustainable quality culture within organisations and move through "Plan-Do-Study-Act" learning cycles
- Creating an overarching organisation ombudsman service to register/identify grievances/good practices
- Thinking about the evaluation process and indicators from the beginning of the implementation of pilot projects or new policies

Second, actions linked to the Monitoring function included actions related to data usage. These actions were divided into two clusters (see Table 48). Some aspects are related to monitoring at the patient interaction level. They included:

- Creating a framework for secure data exchange and communicating about this framework
- Developing an electronic patient record that should support multidisciplinary work by simplifying exchanges between providers and between providers and patients
- Facilitating exchange of information between care settings and focusing on the importance of making digital tools interoperable and user-friendly for providers and patients.

In the Flemish groups, participants discussed a digital care and support plan where all partners (including patients) can access relevant information and easily communicate with one another.

Other aspects related to population management/monitoring, specifically managing routinely available data (such as IMA-AIM data) as well as data generated by field activities. This ‘back-and-forth’ between routine and field data should allow the development of dashboards for local health systems (primary health care areas and community-based health care initiatives). It is also intended to provide a single access point for the different databases by working to link available data (such as IMA-AIM data, Scuby data, and Integrated care projects).

Table 48 – Description Super-cluster "Improve access to/exchange of data, structure communication"

Clusters	Sub-clusters	Brussels (n = 7) (n)	Flanders (n = 23) (n)	Wallonia (n = 17) (n)	Total (n = 47) (n)
Actions to monitor population management	Leverage available data	2	6	2	10
	Provide platforms for data exchange	1	0	4	5
	Sum	3	6	3	12
Actions to monitor the level of patient interaction	Create framework for secure data sharing	1	2	3	6
	Develop one digital patient record	0	11	4	15
	Ensure interoperability of digital tools	1	4	1	6
	Structure communication between providers and between providers and patients	2	0	3	5
	Sum	4	17	14	35

- **Innovation function**

Actions linked to the Innovation function centered around strengthening the platform for learning and innovation. Those were grouped into three clusters (see Table 49).

First, the objective was to create a space for innovation with a flexible working environment (e.g., living lab) and initiating pilot projects. In order to facilitate innovation, there is a need for a reduced regulatory framework and the least possible amount of mandatory administrative expectations.

Also, one objective was to consolidate successful innovations after a certain lifespan. It would then be necessary to think ahead about scaling up good practices (accessibility throughout the territory) and structural funding (and tackle the possible barriers that come along with it). Ideally, at the start of a project, it should be decided how evaluation will take place and the possibilities of continuing good practices, developing new ones, making them sustainable, and defining how this can be further rolled out after positive evaluation.

Finally, some actions also focused on supporting learning networks/systems, for example, creating a learning system than enables the exchange and sharing of good practices. People must be given appropriate time to learn from one another, share their experiences, both in terms of successes and shortcomings.

Table 49 – Description Super-cluster "Strengthen the platform for learning and innovation"

Clusters	Sub-clusters	Brussels (n = 4) (n)	Flanders (n = 24) (n)	Wallonia (n = 14) (n)	Total (n = 42) (n)
Actions to consolidate/ scale up good practices	Scale/consolidate successful innovations	1	7	3	11
	Strengthen practices that work	1	5	6	12
	Sum	2	12	9	23
Actions to create learning system	Support learning networks/system	0	7	1	8
	Sum	0	7	1	8
Actions to promote innovation	Create room for innovation	2	3	2	7
	Initiate pilot projects	0	2	2	4
	Sum	2	5	4	11

- **Identity function**

Actions linked to the identity function revolved around the development of a common and shared vision of integrated care (see Table 50). This means **creating awareness of and adherence to integrated care**. Participants suggested **communicating the value of integrated care** to patients and providers by sharing concrete and positive examples. They recommended starting small and local by using people who are already convinced by the benefits of IC as ambassadors to convince others and gradually expand this common vision. Then, it will be key to **involve the management of organisations in the change process** and have them facilitate the transition process by making it understandable and encouraging people to buy into the process.

Table 50 – Description of Super-cluster "Develop a vision for IC, build a platform for change"

Clusters	Brussels (n = 11) (n)	Flanders (n = 12) (n)	Wallonia (n = 16) (n)	Total (n = 39) (n)
Create awareness and buy-in for IC	8	4	9	21
Develop and communicate a shared vision for IC	3	7	0	10
Support integration through change management	0	1	7	8

4.3.3.3 Overview of actions proposed by the stakeholders

The various actions proposed by the stakeholders can be divided into 12 main categories (super-clusters), from which emerged most frequently, actions aiming to facilitate interprofessional and intersectoral cooperation at the micro and meso levels. The VSM model provides a very useful framework for what needs to be done at the micro, meso and macro levels to move integrated care forward (see Table 51 to Table 53). It provides a good foundation for further implementation to ensure that no roles/functions within each level are forgotten or developed inadequately.

Table 51 – VSM at the patient interaction level

VSM elements	VSM systems	Actions
Operation	Actions that enable actors to work better together with the aim of developing a population-based approach and person-centred care	Actions to facilitate inter-professional and inter-sectoral collaboration during the interaction with the patient • Facilitate multi-disciplinary concertations at micro level • Formalise care and support teams • Leverage coordination centres • Define and support case management
	Actions that allow to activate the patient as driver of integrated care	Actions to assure equity and affordability for all patients • Provide digital access to patients /minimise impact of digital gap Actions to put the person back at the centre of care • Promote goal-oriented care • Strengthen patient self-management Actions to build on patients' expertise • Involve experts by experience • Involve patients in detecting personal and collective needs Actions to strengthen health literacy
Meta-system	Management function	Actions to finance interprofessional and intersectoral work at the level of patient's interaction • Finance coordination activities

Table 52 – VSM at local health system

VSM elements	VSM systems	Actions
Operation	Actions that enable actors to work better together with the aim of developing a population-based approach and person-centred care	Actions to structure and strengthen the first line of care • Define territories • Structure & strengthen first line care • Create one access point for patients • Integrate health care and welfare Actions to strengthen link between first- and second-lines care • Create care pathways • Improve coordination of transition points in care process • Integrate first and second line

		Actions to build trust in local networks • Map available assets and actors • Develop partnership with local authorities • Implement a neighborhood care approach • Stimulate, support regional collaboration
	Actions that enables actors to develop skills and capacity for integrated care	Actions to strengthen peer learning / to build community of practice
	Actions that allows the development of a population-based approach	Actions to develop population-based approach Actions to develop proactive approach towards population
	Actions that allow to activate the patient as driver of integrated care	Actions to build on patients' expertise • Involve experts by experience • Involve patients in detecting personal and collective needs • Involve patients in strategic conversations
Meta-system	Coordination function	Actions to define and consolidate governance, roles and responsibilities for integrated care • Define finality of care • Define mandates and objectives • Design and define new roles • Develop a clear implementation plan • Reduce administrative burden, enhance efficiency • Standardise integrated care approaches
	Management function	Actions to think funding modalities that support integration of care • Develop financial incentives for integration • Diversify funding mechanisms
	Monitoring function	Actions to nourish a culture of evaluation and quality-orientation • Drawing lessons from previous evaluations • Evaluating what is already working Actions to monitor the level of patient's interaction • Structure communication between providers and between providers and patients Actions to monitor population management • Leverage available data
	Innovation function	Actions to consolidate/ scale up good practices • Scale/consolidate successful innovations • Strengthen practices that work Actions to create learning system
	Identity function	Actions to develop a vision for Integrated care

Table 53 – VSM at regional/federal policy framework

VSM elements	VSM systems	Actions
Operation	Actions that enable actors to work better together	Actions to facilitate inter-professional and inter-sectoral collaboration during the interaction with the patient • Expand access to patient info/digital tools for all health care and welfare professionals
	Actions that enables actors to develop skills and capacity for integrated care	Actions to extent/restructure basic training of professionals Actions to stimulate continuous development of professionals • Broaden access to existing training offer • Deepen skills in multidisciplinary collaboration, population approach, change management, goal-oriented care, etc. • Increase data/digital literacy of professionals Actions to strengthen peer learning / to build community of practice
Meta-system	Coordination function	Actions to facilitate decision-making • Strengthen alignment between inter-federal entities • Streamline macro institutional landscape (and division of powers) • Develop new policies with stakeholders, among other, providing feedback to policy makers • Increase efficiency of macro level decision making
	Management function	Actions to think funding modalities that support integration of care • Develop financial incentives for integration • Diversify funding mechanisms Actions to develop common, long-term vision for funding • Develop long-term funding approach • Improve coherence of federal and regional funding Reallocate existing funding
	Monitoring function	Actions to nourish a culture of evaluation and quality-orientation • Drawing lessons from previous evaluations • Evaluating what is already working • Support stakeholders in carrying out evaluations • Providing time and space to install a sustainable quality culture • Creating an overarching organization ombuds service to register complaints and goods practices

	Actions to monitor the level of patient's interaction • Create framework for secure data sharing • Develop one digital patient record • Ensure interoperability of digital tools • Structure communication between providers and between providers and patients
	Actions to monitor population management • Leverage available data • Provide inter-sectoral platforms for data exchange
Innovation function	Actions to promote innovation • Create room for innovation • Initiate pilot projects
	Actions to consolidate/ scale up good practices • Scale/consolidate successful innovations • Strengthen practices that work
	Actions to create learning system
Identity function	Actions to develop a vision for Integrated care • Create awareness and buy-in for integrated care
	Actions to communicate a shared vision
	Actions to support integration through change management

4.4 Discussion

Stakeholders who participated in the discussion groups proposed a large number of actions, making it challenging to report on each of them. Accordingly, we used a clustering method to elaborate an overview of the actions. The actions were discussed according to the Sirocco dimensions, and we found that more abstract dimensions, such as 'Removal of inhibitors' or 'Innovation management', were more difficult for stakeholders to translate into actions. Also, many actions targeted several dimensions at the same time.

We found that although the actions have the merit of broadly addressing different parts of the system, they lack precision and are not always described in sufficiently concrete terms in order to be implemented (e.g. stakeholders did not detail the way how to train the workforce to obtain skills to: develop indicators and dashboards needed for the implementation of population approach, nor to gather the needed data, nor for decision making skills to interpret the findings to translate them into resource allocation or organisational changes). However, they now offer an almost complete view of an integrated system. But given their number, it is impractical to consider carrying out all of these actions simultaneously. Therefore, it will be necessary to propose carrying out these actions in phases, via a transition pathway.

Transitioning to an integrated health system cannot be envisaged as the implementation of independent actions. Rather, it is a matter of introducing into the current system, a set of interconnected actions capable of gradually changing the dynamics of the system. Our health system is seen as a complex adaptive system, made up of elements/agents interacting around an issue (Supporting the population living in the system territory so that it is resilient or able to cope, maintain and restore their integrity, balance and sense of well-being"[12]). This system is organised on three levels. The actions proposed in this chapter are used to describe a systemic constellation (through VSM). Depending on the system level in question, the proposed actions are grouped within certain parts of the VSM model. This grouping is consistent with the missions and objectives of each level. Thus, actions proposed for the micro level are mostly found in the operational part of the VSM model (see Table 51). Actions proposed for the meso level are divided throughout the metasystem part, which mainly covers the need to structure governance at the local health system level and actions to monitor and learn (see Table 52). And actions proposed for the macro level (regional and/or federal levels) are rather small for the operational system and more extensive for the metasystem (see Table 52).

Since the implementation of integrated care has been a subject of research in different countries for several years, the encountered barriers have been described internationally[179-187], as well as in Belgium.[33, 112] Barriers in Belgium have been identified based on the analysis of the 12 'integrated care' pilot projects and a specific study including an interview with 27 macro-level stakeholders from Flanders (SCUBY-study).[112] The major factors restraining the process of scaling-up integrated care are 1) the fee-for-service reimbursement system, 2) the limited data-sharing and 3) the fragmentation of responsibilities between different levels of government.[112, 188] Two years after their start-up, the scientific analysis of the 12 'integrated care' pilot projects identified action points to further implement these projects.[189] In addition, the annual reports of those pilot projects are reviewed each year by the inter-administrative cell which coordinates the pilot projects.[189] And while these action points are more tailored to these specific pilot projects (continuity of pilot governance, collaboration with initiatives in the same region, self-evaluation of project planning and timing, scaling-up), they can nevertheless bring valuable input when establishing governance at the meso level.

It is important to underscore the high rate of participation in the discussion groups. The dynamics of the discussion groups were very positive with a pronounced common will to engage in this transition towards an integrated health system. Some innovation theories point to the importance of favourable external circumstances/windows of opportunity for innovations to become real systemic changes.[190]

Limitations

Finally, it should be noted that this study does present some limitations. First, the numbers presented in the tables are only indicative. The difference between regions is partly explained by organisational factors: the number of discussion groups differed from region to region; six groups were organised in Wallonia and Flanders, and four in Brussels. Also, some SCIROCCO dimensions were addressed more in some regional groups than in others.

The tables should be read as an illustration of the exchanges that took place during the discussion groups. Furthermore, some proposed actions and their cluster can be carried out at different levels of the VSM. This is the case for the action which recommends a more specific description of competences. This action promotes interprofessional work, strengthens trust in the network, and allows for conflict resolution and better coordination.

Additionally, we had a mechanism in place to ensure that there were people from the micro, meso, and macro levels in each discussion group. Many participants wear many hats and as such, often work more at the meso level than at the micro level. Most participants were therefore from the meso and macro levels. As for the Brussels groups, some participants had very little knowledge of the Brussels context. Indeed, they were invited to take part in the Brussels groups because the organisation they worked for had their headquarters in Brussels, but they did not, in fact, work for the Brussels region, but for Flanders or Wallonia. This means that the results per region should be interpreted with some level of caution.

5 PROVIDER PAYMENT REFORMS FOR IMPLEMENTING INTEGRATED CARE AND VALUE-BASED HEALTH CARE: A NARRATIVE LITERATURE REVIEW

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Key findings

- **Next to traditional provider payment methods (such as fee-for-service, evidence-informed case-rate, payment per condition, capitation, and salary/global budget), alternative payment methods were developed, on the one hand, to tackle potential perverse incentives of the traditional provider payment methods and on the other hand, to move from volume to value-based payment models. Pay-for-performance, pay-for-coordination, population-based models (including accountable care organisations) and bundled payments are examples of alternative payment methods tested abroad during the last two decades.**
- **Despite a lack of consistent and robust research findings, the literature suggests that some alternative payment methods show promise in improving specific performance metrics when they create incentives for interprofessional or inter-organisational coordination. In addition, there is a consensus to move from a single provider payment method to a mixed provider payment system.**
- **There is no gold standard or ideal mix to enhance integrated care. Nevertheless, it is advised to combine at least a substantive amount of payments that is not directly linked to providers' measured performance with explicit quality incentives.**
- **The choice of the components to include in the mix depends on the country/region's health care objectives and the provider incentives it wants to support to achieve these health objectives. The choice also depends on the capacity of the system in place (e.g. information management systems and human resources) to support the implementation of the new payment method. The ideal mix for a country, region, or institution will change over time as providers adapt and respond to the incentives, and as health care objectives and challenges evolve.**
- **Via the literature several criteria were identified for the successful implementation of alternative payment methods including availability of data to measure outcomes, interoperable information data systems, extension of the scope of payment to the full cycle of care, risk adjustment, shared savings, trust, political commitment and a culture of continuous improvement.**
- **A key factor in the success of payment reforms is how the change process is designed. The payment reform should not be designed and implemented simply as the adoption of a new contracting model, but rather as part of a broader transformation of the health care system. It is often recommended to start by focusing on the reorganisation of the care process affected by the new payment method (which may imply grouping providers into multidisciplinary teams and ensuring the seamless transition and continuum of care between providers and teams). This approach makes it possible to identify more precisely the gaps and resources available in terms of provider skills. It also provides an opportunity to build and foster trust between stakeholders. The financial reform can follow gradually.**
- **The technical skills needed to make new payment methods work include knowing how to manage information at the population level, manage financial risks, manage the share of resources available among providers / provider organisations, etc.**

- **New payment methods need to be implemented on a scale that is large enough. Indeed, a small number of patients or providers may increase the variability of costs leading to uncertainty in the ability to recover them.**
- **Strengthening or building a collaboration within a network of providers in a context of mutual trust is an essential precondition when implementing new payment methods that include providers of several disciplines/sectors.**
- **Payment reforms require a transformation at the macro level: developing a culture of change as well as the necessary support structures such as data availability, legal infrastructure, personnel skilled in systems reform, sufficient financial support, etc.**
- **Most of the experiences on adapting financing to promote integrated care, emphasize the need to rollout the reform incrementally: starting with "virtual" target payments before shifting to *real* prospective payments to define the best mix of benefits package/population; then, transferring to shared upside risks only (with a possible focus on "quick wins"), and finally, progressively introducing downside risks as providers gain experience (with increased shared savings).**
- **Aside from the gradual transfer of risks to providers, payment mechanisms coming from different payers have to be aligned to reduce administrative burden and make participation more compelling to providers.**

5.1 Introduction

Provider payment reform is often mentioned as a necessary condition for improving care integration. More specifically, existing provider payment methods (PPM) can be considered as barriers to care integration because they are either too focused on volume (i.e., fee-for-services) or they are not aligned with one another and come from different funds managed by different purchasers. Some countries (particularly the United States of America (USA)) have been undergoing payment reform for several years. Lessons learned from this may be of interest for a possible reform in Belgium. Indeed, stakeholders in the Belgian health system consider financing reform as an important condition for successful implementation of integrated care.[112] In the survey results in Chapter 3 'Finance and funding' was chosen as a priority dimension by the largest group of respondents. Also, many actions proposed in the discussion groups (see Chapter 4) are related to the way health care is financed, e.g. the need to diversify funding mechanisms and to think of funding modalities that support the integration of care. It is a question of moving away from a model based solely on volume-based funding to include other financing modalities.

Also, there is a declared political willingness to revise the methods to finance health care.[61] There is an ambition to move away from a predominant fee-for-service financing to payment methods that promote (1) better collaboration between and among professionals and care provider organisations; and (2) the development of value-based health care (i.e., based on the Quintuple Aim model). For example, the current Federal Government is continuing the process of reforming the hospital financing system, in which first steps towards bundle payments are made (i.e. propositions for payment methods centred on transmural care pathways), in hopes of strengthening a seamless care process.[191] RIZIV – INAMI has also launched a reform in budget planning by centring budgetary decisions around the achievement of health goals, thus breaking down traditional budget planning segmented in sectors (hospital, primary care, mental health, etc.).[192] At the same time, a comprehensive reform of the fee tariffs (nomenclature) is ongoing. Among others, the reforms aim at introducing incentives that promote cooperation and quality. It is also anticipate that the reform includes adapted modalities of financing multidisciplinary consultation and cooperation and integrated care in primary care.[193]

Nevertheless, these reforms still hold many unknowns. Indeed, they raise questions in terms of the impact of new payment methods on the integration of care. And various experiences have shown that shifting from a fee-for-service financing system to alternative payment modalities is no easy feat. For these reasons, we conducted a literature review with the following objectives: (1) to update evidence of links between provider payment mechanisms, mixed provider payment systems that include fee-for-services, integrated care, and the Quadruple or Quintuple Aim model; (2) to identify how to transition from a fee-for-service financing system to a mixed provider payment system with a view of supporting integrated care and value-based health care (VBHC).[c] The literature review was conducted in two parts, with two separated search strategies, one for each objective.

For the first part, methods are described in section 5.2.1 and results are presented in two separate sections (5.3.1 and 1.1.1) has the research question can be formulated as follows: (a) what are the links between provider payment mechanisms, integrated care, and the Quadruple or Quintuple Aim model? and (b) what are the links between mixed provider payment systems that include fee-for-services, integrated care, and the Quadruple or Quintuple Aim model?

For the second part, methods are described in section 5.2.2. Two research questions are addressed: (a) how can transitioning from a predominantly fee-for-service financing system to a mixed provider payment system (MPPS) support integrated care and value-based health care (VBHC), and (b) which prerequisites and data should be collected to study and make this transition? Results for these research questions are presented together under section 1.1.1.

5.2 Methods

We conducted the narrative literature review in two parts, one for each objective. It should be noted that, although integrated care goes beyond health care only (and encompasses, for instance, social care), this literature review is limited to health care only. In particular, in this chapter, ‘provider’ (and therefore provider payment) implicitly refers to health care providers only.

5.2.1 Provider payment mechanisms and integrated care

First, we conducted a **structured literature** search in PubMed, Embase and the Cochrane Library. We also included databases from the World Health Organisation (WHO) and the Organisation for Economic Cooperation and Development (OECD). We selected search terms related to integrated care delivery and provider payment mechanisms. Only papers that simultaneously covered both concepts were included. As shown in Table 53, we also used synonymous search terms. The global search equation can be summarised as (integrated care OR synonyms) AND (provider payment OR synonyms). In parallel we conducted a review of the literature on alternative payment methods (APM) initiatives from different countries. We included APM initiatives that have been implemented in developed countries, mainly focused on the healthcare sector and for which there is a qualitative evaluation of the initiative effects on value/quality of care. The search was limited to articles or other documents published since 2018, in English or French, and that included the search terms noted in the title/abstract. We mainly focused our review on articles published in peer-reviewed scientific journals. However, we also included reports, policy briefs or unpublished studies if they meet our inclusion criteria. We excluded commentaries, editorials, letters to the editor, conference abstracts, replies to articles, interviews that did not report on empirical evidence, experience or documents not meeting our inclusion criteria. We initially identified 823 articles of which 99 were retained for this review. Figure 13 illustrates the selection process.

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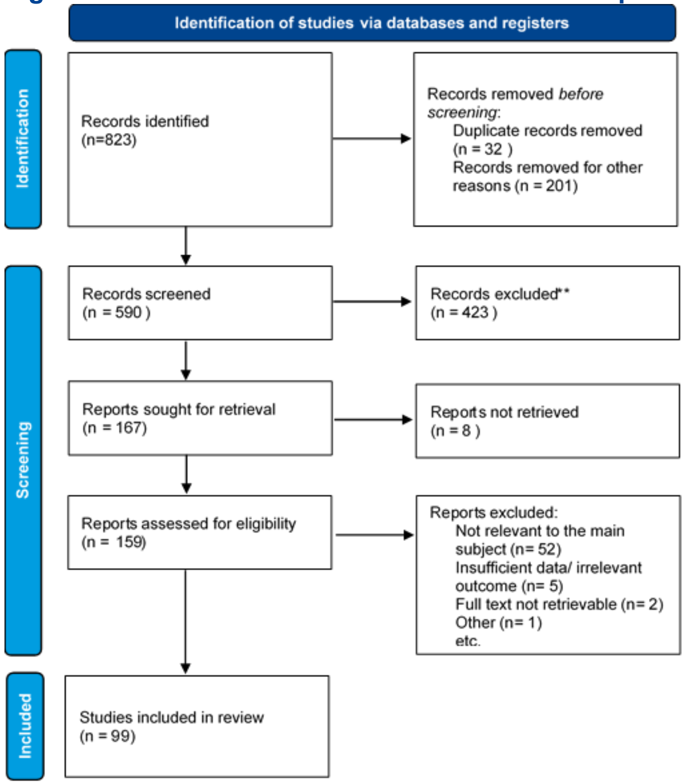
[c] Value-based health care (VBHC) is a framework for restructuring health care systems claiming that value in health care consists of what matters most to patients: the health status they achieve (outcomes) and the price they must pay for it (costs). In this framework, the objective is to generate maximum value for their patients by helping them achieve the best possible outcomes in a cost-efficient way. Importantly, value is created over the full cycle of care.[194.]

Table 54 – Search Terms

Domains	Search terms
Provider Payment	“Provider payment”, “blended payment”, “bundled payment”, “value-based purchasing”, “results-based financing”, “pay-for-performance”, “strategic purchasing”, “active purchasing”, “financing schemes”, “payment mechanisms”, “payment methods”.
Integrated Care	“Integrated care delivery”, “integrated care management”, “care integration”, “integrated care”, “continuum of care”, “provider network”, “systems integration”, “delivery of health care, integrated”, “integration”, “value-based healthcare”, “triple aim”, “quadruple aim”, “quintuple aim”.

Figure 13 – Flow chart of the literature selection process



5.2.2 Transition from a fee-for-service financing system to a mixed payment system

We then formulated two research questions as follows:

- How can transitioning from a predominantly fee-for-service financing system to a mixed provider payment system (MPPS) support integrated care and value-based health care (VBHC)?
- Which prerequisites and data should be collected to study and make this transition?

To respond to these questions, we performed a **rapid review of the literature** with a focus on lessons learned from provider payment reforms that aimed at supporting value-based health care (through the value-based payments included in a mixed payment system).

5.2.2.1 Search strategy

Due to an abundance of grey literature, we narrowed our search to Google Scholar and PubMed.

In Google scholar we used the following equation: ("value-based healthcare" OR "integrated care" OR "triple aim" OR "quadruple aim" OR "quintuple aim") AND "fee for service" AND "payment reform" AND "case study" from 2018 to 2022. We identified 214 references.

In PubMed we used this equation: ((value-based healthcare) OR (integrated care) OR (triple aim) OR (quadruple aim) OR (quintuple aim)) AND (payment reform) from 2018 to 2022. We identified 180 references.

5.2.2.2 Screening and selection

We screened and selected the articles using the following inclusion and exclusion criteria (see Table 54).

First, we excluded all documents that were opinion papers OR that focused exclusively on specific care roles (care coordinator, case manager, nurse practitioner, educator, pharmacy technician, etc.), OR that focused on quality measurement. We also excluded master dissertations.

Second, after excluding those documents, we only included articles and grey literature that reported on payment reforms in Europe, Australia, or North America. We then read review articles and grey literature to synthesise the lessons learned from those reforms before focusing on specific reform cases.

Some additional references from the synthesis of lessons learned and published before 2018 were identified by snowball sampling (meaning they were referenced in articles previously identified).

This resulted in a selection of 31 documents (peer reviewed articles or reports) for this part. No formal quality assessment of these documents was performed.

Table 55 – Inclusion and exclusion criteria for the selection of documents

Criteria	Inclusion	Exclusion
Scope	Payment reform	Specific care roles (care coordinator, case manager, nurse practitioner, educator, pharmacy technician, etc.), focused on quality measurement Payment reform regarding social care
Design	Peer reviewed papers, grey literature	Opinion papers, master dissertations
Language	English and French	Other languages
	Documents published between 2018 and 2022 or referred to in papers published during this period	Documents published before 2018 (except key documents published before 2018 and referred in papers published between 2018 and 2022).
Setting	Europe, Australia, North America	Other countries

5.2.2.3 *Data extraction and analysis*

We started with a review of the most recent articles and elaborated a table with themes that emerged from that literature. We then combined them in the different sections presented in the results.

5.3 Results

Results are presented in three parts: provider payment mechanisms (PPM); mixed provider payment systems (MPPS), and conditions to meet to transition from volume- to value-based (mixed) payment systems.

5.3.1 *Provider payment mechanisms*

Payment mechanisms are often considered to be the main barrier to integration of care, which presents an opportunity and an incentive to reform payment systems. Payment mechanisms currently in place around the world (with different financing mechanisms, sources, allocation, and multiple flows of funding) separate providers by sector. Not only does this stifle professional collaboration and care coordination, it may also hinder having the appropriate incentives to provide integrated care[195, 196]; and, these payment methods are often poorly aligned with health system priorities.[196]

Payment mechanisms can either consist of retrospective and unbundled payments (defined after provision of care) or prospective and bundled payments (defined before provision of care). Each mechanism has its advantages and disadvantages. Retrospective/unbundled payments reduce the likelihood of selecting patients based on their level of health risks since each unit of care provided is reimbursed. However, it also means providers have no incentive to contain costs, and these mechanisms may encourage supplier induced demand.[196] Prospective/bundled payments (global budget or salary) give providers incentives to control costs and deliver care efficiently. But that may incite providers to constrain the resources used per patient or select low risk patients (i.e. cream skimming).[196] Worldwide, the most prevalent payment mechanisms in place are fee-for-service (FFS), evidence-informed case-rate, diagnosis-related (or DRGs), capitation, and global budgets or salary. Table 55 summarises the essential differences between these methods, including the increasing financial risk for payers and decreasing risk for providers. This table is based on the findings from our literature review. Additional elements such as the level of risk adjustment or the impact on prevention could also be included in such a comparison. Complements elements included in Table 55 can be found in the supplement. The following paragraphs describe the different payment systems in more detail.

5.3.1.1 *Fee-for-service (FFS)*

Fee-for-service is one of the most prevalent payment methods in health care systems around the world. Under FFS, providers are paid a fixed price for each service they provide (e.g. office visit or diagnostic test), regardless of outcome or whether services are needed or not.[195] In this payment scheme, providers bear no financial risk contrary to the payers/insurers who bear all the risk.[196] This payment system is often criticised for effectively rewarding volume instead of favouring patient needs, appropriateness of care and value (overprovision) since providers increase their clinical activity resulting in higher costs and higher provider income.[197] FFS may also encourage providers to upcode, meaning they incorrectly classify patient treatments in higher fee brackets.[198, 199] Of course, providing patients with additional services is not always a detrimental approach and can in fact be in the patient's best interest (e.g. improving medication adherence). Furthermore, FFS incentivises providers to seek high levels of patient satisfaction to build patient loyalty. However, providing additional services to raise providers' income can in some cases have no benefit at all for the patient and even pose a risk of clinical harm, for example when a provider persuades a patient to undergo cost-prohibitive or unnecessary procedures/treatments.[200] FFS hinders coordination and collaboration between providers because its core mechanism is to pay individual providers; and it is the most "unbundled" (or fragmented) payment method. Health promotion and prevention is disincentivised as well (except when fee is paid for obvious preventive treatments such as vaccination), since prevention leads to lessened patient needs and fewer visits, consequently lowering providers' income.[200] This payment system can be appropriate in contexts where there is a need to increase productivity, where supply and access are top priorities or where there is a need to retain providers or attract new ones, and cost control is not a top priority.[201]

5.3.1.2 Evidence-informed case rate

In the case-rate model, providers are paid a pre-determined, single, risk-adjusted, prospective fee that covers all the services needed by a patient during a defined episode of care, regardless of the volume of services provided.[200] In this case, providers are financially accountable for balancing and reconciling the cost of provision of care throughout the care period. This payment method may encourage providers to select healthier/less high-risk patients (creaming or cream skimming), shift costs to other providers, or skimp on quality as a way to contain costs.[196] Coordination and collaboration between and among providers are encouraged if the payment per case covers the services of multiple providers. If this is not the case, there is no incentive for providers to coordinate the whole care continuum. Finally, as this is also a volume-based payment model it might foster a ‘more-is-better’ culture and discourage health promotion and prevention.[199]

5.3.1.3 Payment per condition (e.g. diagnosis-related groups)

The payment per condition consists of a single payment for all or most care activities a provider delivers for a particular condition, and it is broader than a payment per case. A common example of a payment per condition is the diagnosis-related group (DRG) payment system typically applied in hospitals, which consists in paying for bundled services covering several treatments and/or services.[202] As in the payment per case method, providers are financially accountable for matching payments to their treatment expenses, thereby discouraging unnecessary/expensive care services and helping to contain costs.[199] However, this payment system may promote patient selection (also known as dumping i.e. avoidance of high severity patients) and quality skimping. It encourages well-coordinated care and cooperation between providers in delivering the services covered by the payment; however, care is still fragmented for patients with multimorbidity since multiple payments for each condition might apply. Finally, other drawbacks include the administrative complexity of this system, the lack of incentives to promote prevention activities, and the risk of providers upcoding the treatments delivered as a way to obtain higher remuneration.[199] [198] This method is useful when the payers’ management competencies are moderate to advanced, in cases where hospital capacity exceeds that of other providers, and when there is a need to improve efficiency and cost control.[201]

5.3.1.4 Capitation

Capitation is a popular model especially in many European primary care settings.[203] In this payment method, providers receive a prospectively and periodically fixed amount for the provision of a specific care package for each patient enrolled.[204] This payment method is broader than the payment per condition because the provider receives payments regardless of whether patients use the health care services included in the care package. As the provider is financially responsible for aligning the cost of treatment with the payments made, this system promotes expenditure control and strategic provider behaviour. However, if the cost of treatments is not properly risk-adjusted, this could push providers to select healthier (less costly) patients. Also, capitation may increase the risk of deteriorating quality of care, stimulate underprovision of services, and over-referral for complex cases that require a higher number of services.[196, 198]. Unlike previously described payment systems (fee-for-service, case-based and payment per condition), capitation encourages health promotion and prevention since a healthy population is less expensive.[196] Under capitation schemes, the provider assumes the financial risk if the costs of treatment exceed the capitation payment received. If the payment applies to one provider only, this payment system does not incentivise coordination across the care continuum. It is a system better suited to meet the needs of patients with multiple chronic diseases, when the patients can choose their provider, when the payer’s management competency is moderate to advanced, and when there is a need to strengthen the primary care sector, promote equity and control costs.[201]

5.3.1.5 *Global budget or salary*

The global budget or salary system is the most bundled form of payment, where providers receive a fixed, periodical amount for providing a set of predefined care services/treatments, regardless of the volume of services administered or the number of patients enrolled.[204] In contrast to the capitation payment system, providers are not financially accountable for a specific population. Global budgets are administratively simple to manage, and they help control expenditures.[196] However, it is a system that may discourage productivity while disregarding patient needs, quality, and outcomes, and may also result in waiting lists. Moreover, innovation is not incentivised in this payment system. It is an appropriate method when cost control is a top priority, and payers' management competencies are moderate.[201]

5.3.1.6 *Summary of individual payment methods*

An important observation to make about these provider payment models is that every method has strengths and weaknesses and can have unintended consequences. However, in a particular context and at a particular time, all payment methods can find their place. Countries should identify the mix of methods that will create incentives that align with their health system priorities and objectives. The ideal mix for a country, region or institution will change over time as providers adapt and respond to the incentives, and as health care objectives and challenges evolve.[201]

In short, no single PPM is perfect or meets all needs. All payment mechanisms create positive and negative incentives; however, it bears underlining that (a) the negative consequences can be anticipated and if needed, complementary administrative mechanisms can be used to mitigate them; (b) it is recommended to implement a comprehensive selection of provider payment methods to try and counteract potential shortcomings. There is therefore a need for judicious utilisation of the PPMs.

Table 56 – Types of Payment Mechanisms

Type of Payment	Increase Utilisation (nb. cases)	Increase Volume (nb. Services / case)	Expenditures Control	Promote Efficiency*	Promote Quality of Care	Administrative Ease	Financial Risk	Degree of Bundling
Fee-for-service (FFS)	+	+	-	-	unclear	+	Payer ↕ Provider	Unbundled ↕ Bundled
Case-rate	+	+	-	+	unclear	-		
Per-condition (DRG)	+	-	unclear	+	unclear	-		
Capitation	-	-	+	+	unclear	+		
Global budget/salary	-	-	+	unclear	unclear	+		

*Key: "+" = "increase"; "-" = "decrease". * Efficiency refers to technical efficiency defined as maximizing output for given input levels i.e., treating as many patients as possible given the resources available. Sources: adapted from Geissler et al. (2011) and OECD (2016).*[196, 205]

5.3.2 *Mixed Provider Payment Systems (including alternative payment methods)*

As stated above, there is no consensus on the ideal mix of PPMs. The selection of PPMs will necessarily be dictated by the country/region's health care priorities and the provider incentives it wants to support to achieve health objectives. This choice will also depend on the capacity of the system in place to support the new payment method selected in terms of information management systems and human resources.[206]

In addition, the current dominant PPMs (fee-for-service, capitation, etc.) do not explicitly incentivise coordination and quality of care. However attempts are made to move from volume- to value-based payment models called alternative payment modes (APMs). These alternative payment methods (APMs) can create powerful incentives to deliver integrated care. Adopting, next to traditional PPMs, payment systems that incorporate appropriate financial incentives is crucial to the successful integration of care.

5.3.2.1 *Alternative Payment Methods*

To counter the potentially negative incentives of traditional PPMs, policymakers from several countries are increasingly opting for mixed provider payment systems that include alternative payment methods (APMs) to stimulate integration of care. There is a set of different APMs, such as such as pay for performance (P4P), pay-for-coordination (P4C), population-based payments, and bundled payments. These schemes are not just an alternative method for reimbursing providers. They also shift the financial risk from payers to providers, define measures of quality improvement based on financial incentives, promote patient-centred care by integrating and coordinating care, and introduce financial incentives tied to patient safety.[207] In this section, we will describe some of these APMs, their characteristics, the main outcomes obtained by implementing these payment models and the major facilitators and barriers to their implementation. A comprehensive description of the mentioned initiative can be found in the supplements.

Pay-for-coordination models

The P4C model consists of payments to one or more providers to coordinate care between certain care services.[208] It aims to promote the integration and coordination of care, improve efficiency, resource allocation and funding, and has been widely introduced in the context of Disease Management Programs in countries such as Austria, France and Germany.[207] [208]

Pay-for-performance models

Under the pay-for-performance model (P4P), providers receive explicit financial incentives for reaching performance target measures, often related to quality. P4P is widespread in the United States and increasingly popular in Europe, mainly in the primary care and hospital sectors.[209] [210] We can find examples of P4P models in the United Kingdom (UK) such as the Quality and Outcomes Framework (QOF - primary care sector), and in the USA with the Hospital Value-Based Purchasing Program (HVBP - hospital sector).

Population-based models

Accountable Care Organisations (ACOs) are multidisciplinary groups or networks of coordinated health care providers who voluntarily practice under a legal entity, and agree to be accountable for the quality, cost, and overall care of patients.[211] Under this model, multiple payment options exist, but the most common is the global payment method with risk sharing. This means that provider reimbursements are tied to quality metrics and reductions in the cost of care, but the realised savings or the burden of losses are shared between the ACO and the payers. There is not a single approach or rule for the redistribution of savings among ACO providers. It will depend on what was agreed upon beforehand. In comparison to traditional capitation, under this payment model high-quality care and clinical excellence are rewarded and measures for risk-mitigating are included.

There are two ACO payment models: the one-sided risk model (upside risk), where there are benefits if costs are below the benchmark, but no penalties if costs exceed them; and the two-sided risk model (downside risk) where providers share in both savings and losses if costs are either below or exceed the benchmark. Two-sided risk models usually share a greater percentage of savings with providers in return for providers sharing the risks in case of loss. For over two decades, ACOs have been developing in several countries such as the United States, Germany, the UK, Spain, New Zealand, and the Netherlands. Examples of ACOs are the Medicare Shared Savings Program and the Medicaid ACOs in the USA, the Gesundes Kinzigtal in Germany, the Canterbury District Health Board in New Zealand, Northwest London Integrated Care Point, Torbay Care Trust and Mid Nottinghamshire Better Together Health and Social Care (known as Better Together) in the UK, and Alzira in Spain.

Another population-based model, is the Comprehensive Primary Care (CPC) initiative in the USA. However, compared to other population-based models such as ACOs, this is a **multipayer model**, covering patients insured by Medicare, Medicaid, and private payers.

Bundled payments models

Bundled payments are predetermined reimbursements for providers on the basis of expected costs for clinically-defined (related to a condition or procedure) episodes of care.[212] Bundled payment models constitute an even more radical change in payment systems than an ACO model, because there is a considerable shift of financial risk from payers to providers[213]: the provider is exposed to the full financial risk if the costs involved in caring for their patient exceed the bundle payment amount. Payments per condition (e.g. DRGs) are essentially bundled payments specific to hospital services categorised by diagnosis, but as of recently include a more comprehensive supply of care.[214] For example, if a patient suffering from severe arthritis requires hip replacement surgery, all charges associated with an inpatient hospital stay, from time of admission to discharge, are covered under a payment-per-condition model. Depending on the care benefits package included in the bundled payment agreement, physicians' fees, the cost of rehabilitation care or treatment in case of possible complications may all be covered by the payment. Bundled payment rewards cooperation among multidisciplinary providers from different sectors and even different organisations or settings. Examples of these models already in force are the Bundled Payment for Care Improvement Initiative and the Acute Care Episode Demonstration, both implemented in USA, and the Bundled Care Groups in the Netherlands (see supplement for a full description of these initiatives).

5.3.2.2 Key Features of APMs

Table 3 summarises the general characteristics, key features, designs, and outcomes that have been evaluated for 14 APM initiatives. These initiatives were implemented in six different countries: USA (7), UK(3), Germany (GE) (1), Netherlands (NL) (1), Spain (SP) (1), New Zealand (NZ) (1). The majority of these APMs were implemented nationally, with five initiatives implemented regionally (SP, GE, NZ, two in the UK). Twelve of them were initiated by public payers, one by private payers and one by a public-private partnership.

Providers and facilities

Most initiatives include groups of multispecialty providers (i.e. different types of physicians, nurses, case managers and social workers, etc.) and different health care facilities (primary care, hospitals, and outpatient clinics). Despite the different types of providers involved in each initiative, the role and involvement of general practitioners (GP) is always central. Some initiatives do not include multispecialty providers: the Quality and Outcomes Framework (QOF) initiative in the UK and the Comprehensive Primary Care Program in the USA, which focus mainly on the primary care sector, and the Acute Care Demonstration and the Hospital Value-Based Purchasing Program, both in the USA, which focus on the hospital setting.

Services included

For the ten initiatives where groups of multispecialty providers are included, payments cover the full continuum of primary and specialised care. In some cases, such as the Medicare Shared Savings Program and the Next Generation ACO Model, payments include inpatient care, medical care, outpatient care, skilled nursing facility care, home health care services, hospice care, and medical equipment.

Types of APM

APM systems included:

- Two P4P models: QOF (UK) and HVBP (USA)
- Nine population-based models : eight ACO models: Kinzigtal (GE), Canterbury (NZ), Alzira (SP), Pioneer ACO (USA), Medicare Shared Savings Program (USA), Next Generation ACO (USA), Northwest London ICP (UK), Better Together (UK); and one multipayer model: Comprehensive Primary Care Program (USA)
- Three bundled payment models: Care Groups (NL), Bundled Payments for Care Improvement (USA), Acute Care Episode Demonstration (USA)

Two of the ACO initiatives incorporate “virtual” spending targets, through risk-sharing arrangements on the existing payment models, typically FFS-models: Kinzigtal (GE) and MSSP (USA). Five initiatives replaced existing payment systems with “real” global base payments in the shape of capitation: Alzira (SP), Canterbury (NZ), Pioneer ACO (USA), Northwest London ICP (UK), Better Together (UK). And one initiative uses both modalities: Next Generation ACO (USA) depending on the track opted for. For the population-based multipayer model, providers are paid through a capitation payment method (or case management fee). As for bundled payment models, payment mechanisms vary: providers continue to be paid under the FFS method and expenditures are retrospectively reconciled against a target price (Care Groups (NL), Model 1,2 and 3 of BPCI (USA), and Acute Care Episode Demonstration (USA)); or they receive a target price instead of submitting FFS claims (model 4 of BPCI (USA)). For the two P4P arrangements, providers are paid for achieving targeted quality and cost metrics.

Quality incentives

Among the 14 initiatives, there were three main modalities tying provider payment to quality performance: (1) quality incentives as bonus payments combined with a system in which providers share in the savings or losses depending on whether or not certain quality metrics are met (Kinzigtal (GE), Next Generation ACO and Pioneer ACO (USA)); (2) providers also share in the savings or losses depending on clinical quality performance but there is no direct bonus payment awarded for reaching high quality scores (MSSP (USA), Acute Care Demonstration (USA), Northwest London ICP (UK)); (3) providers receive bonus payments only (Alzira (SP), QOF (UK), HVBP (USA), Better Together (UK), Care Groups (NL), Canterbury (NZ), BPCI (USA), Comprehensive Primary Care Program (USA)).

Risk adjustment

In seven initiatives, the payment/target is aligned with the risk profile of the beneficiary patient population (Kinzigtal (GE), Care Groups (NL), BPCI (USA), Pioneer ACO (USA), MSSP (USA), Next Generation (USA), HVBP (USA)). However, it was unclear for the remaining initiatives if a risk adjustment was applied. This may be due to the particularity of these initiatives’ payment models which focus on a specific condition where risk adjustments are not as warranted. Among the initiatives applying risk adjustments, most used sophisticated models, including demographic, socio-economic and diagnosis-based morbidity information (Kinzigtal (GE), Care Groups (NL), BPCI (USA), Pioneer ACO (USA), MSSP (USA), Next Generation ACO (USA)).

Shared savings (only applicable for population-based models including ACOs)

In three initiatives, providers agreed to share upside risk only: Kinzigtal (GE), Northwest London (UK), Comprehensive Primary Care Program (USA); while in five other initiatives providers agreed to share both upside and downside risks: Alzira (SP), Next Generation ACO (USA), Canterbury (NZ), Pioneer ACO (USA), Better Care (UK). Only one initiative, the MSSP in the Unites States, allows provider groups to choose either a one-sided or two-sided contract. In the latter, the providers’ share of savings is larger compared to initiatives in which providers assume upside risk only.

Outcomes

All the initiatives were evaluated specifically based on their impact on quality and health care expenditure. Most of the studies adopted a difference-in-differences design to investigate the effects of an initiative on quality of care and cost of care. Most of the studies evaluating ACOs and the bundled payment models demonstrate similar or reduced spending growth and equal or improved quality. One exception to this is the Care Group model in the Netherlands, which shows increased health care expenditure. The Comprehensive Primary Care Program in the United States also showed no improvement in terms of health care savings or quality of care. The impact of P4P was inconclusive, not demonstrating any tangible evidence of cost-effectiveness in the improvement of quality.

Table 57 – Alternative Payment Methods (APM)

Model name and (Year of implementation)	Country	Clinical Focus, Providers, and Setting	a) Payment mechanism b) Quality incentives	a) Risk Adjustment b) One-Sided or Two-Sided Risk	Outcomes	Articles
Healthy Kinzigtal Integrated Care (2006)	GE, Kinzigtal region (Private initiative)	**Clinical Focus** Multiple **Providers** GPs, specialists, and other health care providers **Setting** Multiple	a) Virtual FFS + shared savings (allocated to financial incentives for providers) b) Payment like P4P and shared savings depending on quality metrics	a) Yes; age, gender, and morbidity, based on German risk-equalisation model b) One-sided risk	• Lower hospitalisation rates, higher life expectancy and higher mean age at time of death • From 2007 to 2014: total cost savings of 38.2 million USD and cost reduction of 7% per insured person in year 9 of the project (a reduction of 7 million USD) • No difference in quality of care	215 216 217 218 219
Care groups (2010)	NL, nationwide (Public initiative)	**Clinical Focus** Chronic care (diabetes, vascular disease and, COPD) **Providers** Primary care and outpatient specialist care **Setting** Multiple (primary and outpatient care)	a) Disease-based bundled payments b) Performance is a factor in price negotiations (based on national quality standard)	a) Yes, using a national risk adjustment model b) N/A	• Significant improvements for some processes and outcome indicators • Between 2008 and 2009: health costs for patients under bundled payment model increased by €288 • The use of specialist care decreased by almost 25% (a per-patient per-year savings of €36) • Bundled payment increases health care expenditure for patients with multimorbidity	220 221 222
Quality and Outcomes	UK, nationwide	**Clinical Focus** Preventive Care and Chronic Care	a) P4P b) Quality-related payments	a) No b) N/A	• Some improvements in process-of-care	223 224

Model name and (Year of implementation)	Country	Clinical Focus, Providers, and Setting	a) Payment mechanism b) Quality incentives	a) Risk Adjustment b) One-Sided or Two-Sided Risk	Outcomes	Articles
Framework (QOF) (2004)	(Public initiative)	**Providers** GPs **Clinical Setting** Primary care			• Decrease in ambulatory care-sensitive emergency department admissions • No clear evidence of patient outcome improvements	
Canterbury District Health Board (2007)	NZ, Canterbury District (Public initiative)	**Clinical Focus** Chronic diseases **Providers** Primary and hospital physicians **Setting** Primary care, hospital, community	a) Annual global budget + shared savings and losses b) Financial incentives based on performance	a) No b) Two-sided risk	• Moderate demand for acute hospital services, especially among older people • Decrease in acute medical admissions, re-admission rates, length of stay, waiting times, emergency department attendance and emergency care spending • Decrease in spending on pathology, radiology, and pharmacy services • More services realised in the community • More referrals	225 226 227 228 229
Bundled payments for Care Improvement (BPCI) (2013)	USA, nationwide (Public initiative)	**Clinical Focus** Acute care **Providers** Acute care hospitals, physician group practices, other providers, suppliers, or organisations **Setting** Inpatient and outpatient settings	a) Disease-based bundled payments b) Financial arrangements include performance accountability	a) No b) NA	• Significant decrease in episode payment of $ 1 166 (3.9%) for patients undergoing lower extremity joint replacement (LEJR) • No difference in quality measures and outcomes	230 231 232
Comprehensive Primary Care	USA, Nationwide	**Clinical Focus** Primary care	a) Care-management fee b) Performance-based incentive payments	a) NA b) One-sided risk	• No savings to Medicare • Some evidence of improved quality and reduced ED use	233 234

Model name and (Year of implementation)	Country	Clinical Focus, Providers, and Setting	a) Payment mechanism b) Quality incentives	a) Risk Adjustment b) One-Sided or Two-Sided Risk	Outcomes	Articles
Programs (CPC) (2012)	(Public initiative)	**Providers** Primary care providers **Setting** Primary care practices			• No differential changes in patient and provider experience	
Alzira model (1999)	SP, Valencia (Public-private partnership)	**Clinical Focus** Primary and specialty care **Providers** Multiple **Setting** Primary and Specialised / Hospital Care	a) Real, annual capitation paid to main contractor b) P4P, no link between quality and savings	a) NA b) Two-sided risk	• 34% reduction in hospital re-admission within 3 days, 20% reduction in length of stay and 25% reduction in emergency department use • 20% higher patient satisfaction • Shorter waiting times • 27% lower expenditure per capita	235 236
Pioneer Accountable Care Organizations (Pioneer ACO) (2012)	USA, Nationwide (Public initiative)	**Clinical Focus** All care for all patients assigned to participating health care organisations **Providers** Integrated care model: all participating providers involved in targeted care **Setting** Primary care, specialists, inpatient facilities	a) Global budgets and shared savings incentives b) Explicit financial incentives for quality indicator scores	a) Yes, using MR-DRG b) Two-sided risk	All organisations: • Decrease of 1.2% ($116.90 annual savings/beneficiary) • Decrease of 1.9% and 4.5% respectively in utilisation and spending on low-value services Individual ACO: • Reduced hospitalisations and emergency department visits, between 6 to 8%; • Reduced Medicare spending of 6%	237 238 239

Model name and (Year of implementation)	Country	Clinical Focus, Providers, and Setting	a) Payment mechanism b) Quality incentives	a) Risk Adjustment b) One-Sided or Two-Sided Risk	Outcomes	Articles
Medicare Shared Savings Program (MSSP) (2012)	USA, Nationwide (Public initiative)	**Clinical Focus** Full set of services delivered under Medicare Parts A and B **Providers** ACO professionals (physicians and non-physician practitioners). Involvement of GPs **Setting** Primary care and hospital care	a) Virtual FFS + shared savings incentives b) Savings depend on overall quality score. Minimum savings rate and minimum losses rate that must be met to qualify for shared savings or loss repayment	a) Yes, using the CMS-HCC risk adjustment model. Initially prospectively, but retrospectively adjusted b) ACOs can choose to accept one-sided risk (Track 1) or two-sided risk (Tracks 1+, 2 and 3)	- Modest decrease in Medicare spending - No improvement in quality of care, low-value services use and perioperative outcome measures - Significant reduction in hospital and emergency use - Improvement in some patient experience measures	237 240 241 242 243 244 215
Next Generation of ACO (NGACO) (2016)	USA, nationwide (Public initiative)	**Clinical Focus** Primary and specialty care **Providers** GPs and specialists **Setting** Primary care, hospitals, and home health facilities	a) Both Virtual, FFS or FFS and PMPM payment. Real PMPM payment equal to percentage of FFS reduction or capitation. b) Shared savings conditional on meeting quality metrics; losses are independent. In addition, quality score used to determine discount applied to spending target	a) Yes, using the CMS-HCC model. Initially prospectively, but retrospectively adjusted b) Two-sided risk	- Little evidence available; after 1 year of the NGACO program: 1.7% decrease ($18.20 per beneficiary per month) in Medicare spending relative to a comparison group; although there was a significant variation among NGACOs.	245
Northwest London ICP (2011)	UK, Northwest London (Public initiative)	**Clinical Focus** Elderly and diabetes **Providers** Multiple **Setting** Multiple	a) Capitated payment + P4P b) Share in savings conditional on efficiency; P4P linked to quality outcomes.	a) Not clear b) One-sided risk	- Some improvements in process parameters and intermediate outcomes - Patient and professional satisfaction levels are positive	246 247 248 249 250

					• Improvements in interprofessional learning, clinical knowledge, and collaborative work • No changes in the use of care or costs	
Acute Care Episode Demonstration (2009)	USA, Texas, Oklahoma, New Mexico, and Colorado (Public initiative)	**Clinical Focus** Orthopaedic and cardiac procedures **Providers** Specialists **Setting** Hospital care	a) Disease-based bundled payment b) Shared savings conditional on quality reporting and monitoring requirements	a) No b) NA	• Net average of $319 savings/episode • No difference in quality and utilisation measures • Decrease in post-acute care spending for both orthopaedic and cardiac surgery	251 252
Better Together (2014)	UK, Mid-Nottinghamshire (Public initiative)	**Clinical Focus** Multiple **Providers** Multiple **Setting** Primary, secondary, and community care	a) Global capitated contract + P4P b) Outcome payment tied to performance	a) N/A b) Two-sided risk;	• Between 2016-2017: £23 million in total savings, £3.5 million in gross savings, and a 122% return on investment • Reduced unnecessary emergency attendance, emergency department waiting times, length of stay and overall number of hospitalisations • Older people had 29% less emergency department visits and saw 23% decrease in hospital admissions	253 254 255 256
HVBP (2013)	USA, Nationwide (Public initiative)	**Clinical Focus** Acute care **Providers** Multiple **Setting** Hospital care	a) P4P b) Incentive payments for the quality of care	a) Yes, based on MR-DRG b) NA	• No significant improvements in clinical-process and patient-experience measures	223 257 258 259

5.3.3 Payment reforms: conditions and conducive factors

A payment system reform with the objective to develop or strengthen integrated care requires defining the MPPS that will be implemented and the steps to get there. Therefore, in this section we focus on the literature which addressed these specific points.

5.3.3.1 Choosing the APM and MPPS to implement

As seen above, different payment modalities each have different objectives and outcomes. On one hand, the aim may be to strengthen interprofessional or interorganisational collaboration. This may be designed with several objectives in mind: 1) strengthen the integration of care for a population (e.g. through a capitation payment scheme); 2) strengthen the integration of care for an episode of care (or care pathway) for a high-risk population (e.g. bundled payments); 3) strengthen coordination activities by way of a specific payment method (e.g. P4C). On the other hand, the objective may be to incentivise providers to offer higher value of care (value-based payment (VBP)). This can be achieved by tying provider payment directly to "added value" metrics of care (through P4P or P4Q). And finally, the aim may be to optimise the use of resources among a set of providers through a shared savings model.

Despite the lack of consistent research findings, the literature suggests that some APMs show promise in improving specific performance metrics when they create incentives for interprofessional or interorganisational coordination. For example, shared savings within global capitation models were specifically associated with greater care coordination among ACO hospitals.[260] And some bundled payment programmes linked to quality performance metrics were associated to an increase in care coordination activities, showing that value-based payments may facilitate care coordination.[261]

Additionally, there is a consensus to move from a single provider payment method (PPM) to a mixed provider payment system (MPPS).[262] One of the reasons for diversifying a payment system is to mitigate the weaknesses of some payment methods. For example, VBP is criticised for its narrow perspective on value. This is the case for bundled and P4P models when they are used as a single mode of payment. In both cases, we find that there is a *“relatively narrow definition of value and that neither system is well-suited to simultaneously incentivise the multiple dimensions of value”*[263] as it is defined in Belgium[d].

Bundled forms of payment (one of the main modes of VBP) only seem appropriate for a well-defined care trajectory for a population with a specific risk or health condition. If reforms only focus on such forms of payment, they run the risk of increasing fragmentation of care (at the primary care level).

Based on a comprehensive synthesis of literature addressing different modes of payment, Cattel et al. (2020) propose to combine different payment components (i.e. a mixed provider payment system - MPPS) with at least: (a) a substantive amount of global base payments (the bulk of payment amounts), and (b) explicit quality incentives (mainly bundled or P4P/Q).[262]

Global base payment is defined as a mode of payment *“that is not directly linked to providers’ measured performance. The reason is that many aspects of value, such as well-coordinated care and many health outcomes, are difficult or impossible to measure and attribute”.* [263] This mode of payment is particularly important for primary care financing. It should finance a multidisciplinary group to provide a comprehensive set of care services for a predefined target population. *”By adopting a person-based rather than a condition-based approach, incentives for prevention and cost-conscious behaviour are strengthened”*.[263]

This payment approach (including capitation) is in line with recent reviews shedding light on initiatives to promote patient registration in primary care facilities in several countries.[264] Indeed, there is a large tendency to push for primary care patient enrolment because it facilitates “*stable relationships between patients and primary care providers”.*[265] It helps develop the primary care provider’s role “*who is familiar with their patient’s medical*

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[d] In Belgium, the general frame used to define value is the “Quintuple Aim Model”.

history and who not only supplies primary care services, but also acts, formally or informally, as the patient's advisor and manager of the overall care the patient receives".[265]

5.3.3.2 Need for a customized and context-sensitive approach to choosing the best MPPS

In addition to the consensus on the need for developing a MPPS, decision-makers and stakeholders also agree that there is no "one-size-all-fit" solution.[266] Developing the best MPPS is dependant of the context[208] and breadth of ambitions of an integrated care system or programme[202]. The objective is to "purposefully" align PPMs to build the most appropriate and efficient MPPS. The idea is to align supply-side policies (PPMs) and policies that influence demand (e.g. gatekeeping function, referral system, cost-sharing, etc.).[208] This is illustrated with examples of ACOs presented in section 1.1.1. They differ in their approach to care integration, governance, contracting models, funding and payment methods, incentives, population targeted, interventions and the level of patient engagement. This might reflect their adaptation and alignment to other incentives, as well as their promising results.

Several authors have studied the criteria to consider in the search for the most appropriate APMs and other contextual characteristics. A report published by the Boston Consulting Group in 2019, studied 30 alternative payment models around the world (payment-for-performance, bundled payment and population-based payment) and identified seven criteria for successful APMs (regardless of the payment model):[267]

- Tracking and reporting a minimally sufficient set of health outcome metrics: measuring and reporting the health outcomes that matter to patients is a prerequisite for achieving a sustainable APM reform. The most successful initiatives studied include providers' financial incentives to report outcomes, or those implemented in countries where reporting outcomes were part of the national health policy.
- Extending the scope of payment to the full cycle of care to create incentives for providers to innovate across the full continuum of care delivery and manage the total care costs. Successful initiatives did extend the scope of the APM to the full cycle of care (from diagnosis to physical therapy).
- Adjusting for differences in risk in heterogeneous patient populations to avoid perverse incentives that encourage providers to select the healthiest patients. APM should incorporate a risk-adjustment model to account for patient mix, avoid patient dumping (avoidance of high-risk patients) and set prices that are fair to all providers.
- Investing in data and advanced analytics, by developing platforms that integrate data from several sources and continuously inform stakeholders about their performance.
- Sharing savings to ensure long-term financial sustainability.
- Building an environment of trust between providers, payers, and patients. Initiatives should be focused on improving outcomes and not just cost containment, and providers should be involved in the design, implementation, and adjustment of these payment initiatives (including setting outcome targets and performance bonuses).
- Encouraging a culture of continuous improvement: implementing APMs is an ongoing process that takes time and requires a transformation of clinical practices. Organisations should foster and adopt a learning mindset in which they commit to experimentation, innovation, and continuous improvement over time.

Regarding the implementation of accountable care models, McClellan et al. (2014) suggest there are four core principles that policy makers should consider when shifting to an ACO model:[268]

- Take a broader perspective than just treating illness by highlighting population health and wellness instead; expand beyond hospital-centred care and include primary and community care, public health, and social and behavioural care;
- Adjust payment mechanisms to reward outcomes rather than activities; this involves a gradual transfer of risk from payers to providers.
- Create a favourable environment for organisations to collaborate and coordinate care. This requires strong leadership and continuous learning and may also require market adjustments as a way to reduce transaction costs.

- Encourage interoperable information data systems that enable multiple providers and patients to share data in real-time.

Pimperl (2018) also suggests some common core principles associated with the successful implementation of ACO models:[269]

- Policy context: There should be a strong policy commitment to switch to a value-based payment system, using payment models that build the right financial foundation for the incremental change necessary to value-based approaches, and a legal framework that allows payers to set up ACO contracts.
- Contract characteristics: Benchmarked long-term shared savings contracts that are regionally- and risk-adjusted and measured against pre- and post-intervention periods, patient, and quality outcome measures.
- Organisational structure: Facilitate the formation of small regional ACOs to foster trust and accountability between providers, payers and ACO beneficiaries through regional-level communication and collaboration.
- Performance management: ACOs should use performance measurement to monitor and facilitate continuous improvement.

5.3.3.3 Working on the context: a stepwise approach to create the right conditions for MMPS implementation

The above points show that reforming the modes of payment, in a system strongly influenced by fee-for-service payment, requires many conditions to be met. These have been identified at the different levels of the health system: provider, networks of providers, policy makers.

Redesigning the care delivery process

Our review of payment reforms tested in North America and Europe suggests that a primary driver for building conditions for payment reform is a redesign of the care delivery process: payment reform should not be strategically designed and implemented simply as the adoption of a new contracting model, but rather as part of a broader transformation of the health care system.[270, 271] That often involves thoroughly reassessing the purpose of the process (i.e. putting patients in the driver's seat and not focus only on disease management), grouping providers into multidisciplinary teams, each of them in charge of a specific package of services, and the seamless transition and continuum of care between providers and teams.[271-273] This can initially be achieved through multidisciplinary care protocols or care models devised with professionals[273] by integrating treatments, and based on patients' health. This approach makes it possible to identify the gaps and resources available more precisely in terms of provider skills. It also provides an opportunity to build and foster trust between stakeholders. Several authors also note that this may generate a sense of achievement and "create an organisational culture that supports good internal relationships and collaborations, engages professionals, and facilitates changes in their behaviour".[271] Finally, it provides an opportunity to reframe roles and functions, or define new ones such as care coordinators, social workers, behavioural care specialists, etc.[274.]

Building provider capacity, and administrative and technical skills

The implementation of a value-based payment mode and MPPS is often confronted to a lack of provider capacity to bear new (financial) risks.[275] What is especially important in this case, is to make providers and payers well aware of the difference between performance risk (which they can control) and insurance risk (which they cannot control).[271] Indeed, *"most providers will voluntarily sign a contract that rewards them for providing higher-quality care at a lower cost as long as they are only held accountable for the performance risk and not the insurance risk"*.[271]

Key technical skills are needed to manage risk. These include (1) the capacity to generate patient information and statistics from electronic health records or extract claims data from health insurance companies[266]; and (2) the capacity to change the financial transaction agreements between providers, and between payers and providers.[274] These skills include knowledge and adequate digital and organisational technology infrastructure.[276,277,278] Knowledge makes the payment reform understandable[276,278] (e.g. by tying it to a limited number of performance indicators)[279]; and infrastructure provides timely information on the patient population (risk characteristics) and resources. It also allows for a progressive alignment of various organisational metrics.[277]

A new value-based mode of payment also means enrolling enough patients in the new payment system. Indeed, a value-based payment mode often pays a flat rate per type of care process or type of patient population (i.e. defined risk), which represents a “mean” cost. Therefore, a small number of patients or providers may increase the variability of costs leading to uncertainty in the ability to recover them.[271]

Imbalance in the share of provider capacity is another challenge to overcome when transitioning to new modes of payments. Indeed, large organisations with existing capacities could take advantage of payment system reforms to strengthen their already dominant position over small/er (often primary care) organisations.[266] This, specifically, should be taken into account when specifying one or more provider organisations as the “designated recipient(s)” or a (new or existing) third legal entity.[271] If the designated recipient is an organisation with more capacities — a hospital, for example — it may impede the expected shift from hospital-centred to primary care-centred (and therefore population-centred) networks.

As a whole, building adequate and shared provider capacity to manage a new payment system is considered a prerequisite before implementing value-based or new MPPSs.[272]

Strengthening or building a trusting collaboration within a network of providers with a strong primary care component

Building a trusting collaborative relationship or cementing an existing one between providers of a network, is an essential precondition when implementing new financing reforms[273] that include multidisciplinary providers and rely on primary care (network) as a main contractor.[263] It requires a stable leadership at network level (or meso level) and increased funding to support infrastructure at that same level.[266, 276, 277] The creation of “integration coordinators” to work closely with clinicians can also be an effective way to build or bridge trusting relationships among network providers.[273]

Indeed, implementing new modes of payment (including bundled payments) should not be considered as a mere formality when setting up a new contracting model. It should be part of a broader transformation of the relationships between health care system stakeholders, i.e. *“based less on short term transactional negotiations and more on long-term collaborative relationships between payers and providers”*. It affects *“almost all aspects of governance within organisations, and demands a different type of collaboration among organisations”*.[271] It is considered as a key component of a value-based health care system.[271]

The relationship of trust is important because it facilitates the acceptance, by stakeholders, of changes inherent to the initial phase of transitioning from one payment method to another. Shifting to new modes of payment creates uncertainty in terms of financial risk and the willingness of stakeholders to share that risk equitably.[276] It can in fact be perceived, initially, as a process that could increase the risk of *“deteriorating income for some care professionals, and potential limitations to patients’ freedom of choice”*. Indeed, it is frequent to see *“limited effects in pilots and demonstrations in regard to quality improvement, financial results, and (potential) savings”* at the initial phase of implementation of new forms of payment. If the results are disappointing during the first stages of the new contract, both the payer and the provider organisation may be unwilling to proceed and follow through with new value-based payment projects. This is the case for all doctors who are traditionally more in favour of fee-for-services than the uncertainty of new modes of payment.[280] As a consequence, stakeholders may also be tempted to use “privacy” argument for not sharing information[273], or refusing to use criteria to define quality, and develop “gaming” attitude. Promoting trusting relationships and engaging providers is expected to help overcome this and increase their willingness to bear risk together as a network.[271] As long as early adopters *“increase their experience with new forms of payment and more evidence of positive effects becomes available, the confidence, acceptance, and motivation for this new payment model will grow”*.[271]

The need for a conducive “macro” environment and support from policymakers rather than control

For the conditions described above to come together, there needs to be a conducive macro environment in place. This includes support structures such as data availability, legal infrastructure, personnel skilled in systems reform, sufficient financial support for the development of the meso level, etc.

Data availability and capacity (including seamless flow between different databases) to develop value-based payment systems can often create a bottleneck, specifically if data handling capacity is insufficient.[277] Macro-level stakeholders have a significant role to play in overcoming this and building and fostering a "system atmosphere or culture" conducive to change. In that respect, factors such as having a clear federal policy that promotes reform, as well as a sense of urgency are also important.[276] Among other key elements, decision-makers must ensure that all actors involved have a seat at the table, that innovative solutions are welcome and tested, and that health system stakeholders feel they can rely on the support from government leaders.[277] In the same time, policymakers should temper their ambitions and avoid the temptation to move too fast with their reform plans. They should instead *"keep the door open for new innovations (whatever the source)"*.[280]

At the macro level, what is most important is technical support. But that has proven to be challenging. Indeed, observations from a review of ACO development in the USA, show that technical support to ACOs is highly segmented. Also, timing of technical assistance, particularly at the beginning of the implementation process, is crucial to help ACOs organise themselves as changes are implemented. However, the review points out that despite the challenges, the *"modalities for technical support have generally included learning collaboratives, one-on-one coaching, cross-ACO working sessions, an annual conference, and a dashboard"*. It also underlines that *"technical support largely focused on sharing tacit and experiential knowledge"*.[279]

5.3.3.4 Incremental financing reform through progressive fulfilment of contextual preconditions rather than "Big Bang" reform

Most of the experiences in developing integrated care emphasise the need for reform to rollout incrementally. *"Incremental reform is often contrasted with the rational comprehensive method to decision-making (…) where the rational comprehensive method attempts to consider all possible avenues to achieve a policy objective, incrementalism is more pragmatic (…) effective incremental reform learns from past failings in a process of trial and error and retrial (…) incremental reform is usually the most viable option in any context with strong institutional barriers, a large degree of uncertainty regarding the implementation or outcomes of policy decisions, and where there is a lack of evidence about what works"*.[281] It is no different for financing reforms.

Applying an incremental approach to the transition from a volume-based to a value-based model and MPPS should be required to effectively support and complement the ongoing process of redesigning the process of care, strengthening provider and payer capacities, and building trust within a collaborative network.

From risk mitigation to bearing risks

Experiences reviewed suggest adopting risk-mitigating measures[263] by gradually transferring risk to the provider. Indeed, initiating a reform engenders some uncertainty and may expose providers to excessive financial risk and pressure (i.e. difficulties to make financial projections due to the evolving nature of value-based payments contracts with different plans; delays in payments, etc.).[275]

The following approach has been tested successfully: first, starting with "virtual" target payments before shifting to *real* prospective payments to define the best mix of benefits package/population; then, transferring to shared upside risks only (with a possible focus on "quick wins"), and finally, progressively introducing downside risks as providers gain experience (with increased shared savings).[263],[275],[274]

Incorporating "virtual" spending targets (i.e. by building risk-sharing arrangements on the existing payment modality, most often a FFS-basis, during the initial phase of development) is expressed in terms of retrospective payments (versus "real" payments which are prospective). Retrospective payment allows stakeholders to develop the necessary care transformation while easing through the initial legal and administrative hurdles.[272] Furthermore, retrospective payments allow providers to identify clinical interventions that save money. This is important because experience shows *that "payment reform efforts have a better chance of being successful when the clinical intervention has been proven to save money"*.[266]

At the same time, it may be useful to plan for payment mechanisms (in addition to modes of payment already in place, i.e. FFS) that *"pay providers to invest in infrastructure, report quality metrics, and achieve specified quality improvement targets".*[282]

The next steps suggested in payment reform are to create safe bridging strategies (e.g. shared savings with no immediate timeframe for introducing downside risk: one-sided risk), while progressively moving providers towards managing risk-bearing. This will reduce the sense of uncertainty for providers[278] and may help prompt innovators to participate (in the care re-structuring process).[266] At this stage, incentivising through quick-wins has also been promoted to create trust.[274] Decreasing low-value prescription and promoting generic drugs prescription is a good example of this.[276] Another important challenge at these initial stages of payment reform, is the need to enrol enough patients in the care re-organisation. If the reform affects a too small patient population, there may not be enough momentum to implement it or enough potential to save money.[266, 277]

The last step in payment reform is to transfer providers from a one-sided model to a two-sided model, sharing in both savings and losses (downside risk). This step requires sufficient provider capacities and is suggested only when providers have gained enough experience. Concurrently, when shifting to a two-sided model, experience suggests progressively increasing shared savings.[263]

Ensuring that MPPS payment mechanisms are aligned and contribute to care integration

Aside from the gradual transfer of risks to providers, experiences in payment reform highlight the impact that multi-payer efforts have on facilitating provider involvement in payment reform. In fact, an aligned approach or methodology can reduce administrative burden and make participation more compelling to providers.[266] Additionally, an aligned approach in payment reform appears to be an important condition to avoid further care segmentation. For example, choosing to develop bundled payments for a particular subgroup of the patient population has to be strongly adapted to other existing payment environments.[283] It must also adapt to the capacities of different providers (for example, starting with different payment systems — bundled or capitation — based on providers' capacities).[272]

Beyond the importance of policymakers ensuring that the multiple modes of payment coming from different payers all align, it may also be useful to streamline the financial flows coming into the collaborative network/system. This implies having sufficient resources and accounting competencies at the meso level.[274]

5.3.3.5 *Synthesis*

Table 57 proposes a synthesis of conditions and steps for reform that aim at moving from a volume- to value-based form of payment. Both conditions and steps for incremental approach are summarised on the same table as they are interrelated. The content of this table comes from articles mentioned in the third column. The structure has been created by the authors, but has been largely inspired by authors such as Cattel et al. (2020)[262], Miller (2015) [272], Struckmann et al. (2017)[202], Izguttinov et al. (2020) [274] or Steenhuis et al. (2020)[271]

Table 58 – Synthesis of conditions and possible steps for financing reform

Conditions – Actions		Context – Type of Article – Source
Initial steps for creating necessary conditions for financing reform		
Redesign the care process as the primary driver to build conditions for payment reform implementation. This should encourage stakeholders/policymakers to:	• Question the purpose of the care process • Structure teams and transitions among them (including creation of new functions if needed) • Create multidisciplinary protocols • Build trust	• North America (USA) – review [283] • Mainly North America – Grey literature – review (110) • Ontario (Canada) – Case study (111)
Support at macro level and from policymakers to:	• Ensure conditions such as data availability, legal infrastructure, personnel skilled in systems reform, sufficient financial support for the development of the meso level • Build a “system atmosphere or culture” that is conducive to change. That includes federal policy clearly that promotes reform, but also sense of urgency, or openness to innovation and inclusiveness of all stakeholders. • Provide technical assistance (avoid segmentation, invest time at the beginning and focus on experiential and tacit knowledge)	• Washington State (USA) – review (115) • Vermont (USA) – case study [284] • Netherlands – case study [276] • USA – review [280] • USA – review [279]
Next steps for creating necessary conditions for financing reform		
Build providers’ technical skills and capacities. This includes capacity to: Manage capacity imbalances between providers to steer away from a hospital-centric network	• Manage information on patient population (health and services utilisation); tendency is to try and prioritise (i.e. limit) the number of performance indicators. • Get information on financial transactions between provider network members • Enrol enough patients in the new payment plans	• North America (USA) – Grey literature – review [283] • North America – Grey literature – review [266] • Mainly North America – Grey literature – review [272] • ACO Washington State (USA) – review [277] • Case study of value-based payment in home care in New-York [278] • USA – review [279]
Pre-existence and building of trusting collaboration within a network with strong primary care component. At meso level, this requires:	• Stable leadership • Increased funding to support infrastructure • Integration coordinators who work closely with clinicians	• Mainly North America – review [263] • Washington State (USA) – review [277] • Washington State (USA) – case study [274] • Ontario (Canada) – case study [273]

Incremental Financing Reform	Context – Type of Article - Source
Initial steps for financing reform	
Plan for mix of payment mechanisms (in addition to pre-existing mode of payment – e.g. FFS) that "pay providers to invest in infrastructure, report quality metrics, and achieve specified quality improvement targets"	• North America (USA) – Grey literature – review [282]
Virtual payment to define the best benefits package/population to be included in new payment mode helps create a population- or episode-based form of payment	• North America (USA) – Grey literature – review [283]
Further steps for financing reform	
Start shared savings only by transferring upside risk first and then transferring downside risk	• Mainly North America – review [263] • Case study of value-based payment in home care in New-York [278] • Case study Washington State (USA) [274] • USA – review [279]
Ensuring that payment mechanisms included in MPPSs are aligned and contribute to care integration	• USA – review – grey literature [266] • USA – review [283] • Washington state – review - [274]

5.4 Discussion

The results of this review have made it possible to list the different payment modalities tested around the world to strengthen the integration of care or VBHC. The trend is to move from a retrospective form of payment (e.g. fee-for-services) towards prospective forms (e.g. payment per condition, capitation, and global budget). Also, attempts are made to move from volume- to value-based payment models called APMs. These include P4P, P4C, ACOs, or bundled payments. Finally, it is possible for providers to share in the savings (and losses) of their practice by treating patients under bundled payment programmes (by episode of care, or person-based care).

This review was not intended to be systematic but to give insights to support the design of integrated care funding policy by decision-makers. Therefore, we only searched main databases for peer-reviewed journals. As Medline, Econlit and grey literature data bases were not searched, the evidence material cannot be considered as exhaustive. However, by applying snowballing method, we are confident that major papers were retrieved. Due to the narrative design of the review, we did not assess the quality of the retrieved documents. In addition, study selection and data extraction were not performed in duplicate. Nevertheless, they were regularly discussed within the research team.

Currently the provision of care in Belgium is predominantly financed through fee-for-service payments.[285] Notably, a fee-for-service system is the main financing mechanism by which GPs, dentists, and medical specialists are remunerated. The fee-for-service system is also the dominant system for other ambulatory care providers such as home care nurses, midwives or physiotherapists. In hospitals, medical and medico-technical acts (consultations, laboratories, medical imaging and technical procedures) and paramedical activities are remunerated via a fee-for-service system, both in inpatient and outpatient settings, with a few notable exceptions that are largely financed though lump sum payments. Inpatient care is mainly financed through payments per condition (using All Patient Refined Diagnosis-Related Groups – APR-DRGs). Nurses working hospitals inpatient settings are salaried and financed by the hospital budget. However, the hospital budget is insufficient and complemented by other revenues like deductions from the physician fees and supplements paid by the patients. Community health centres (*wijkgezondheidscentra* / *maisons medicales*) use a capitation system were GPs and other health care providers are salaried.

Alongside these traditional provider payment mechanisms, alternative payment mechanisms are also used, and mixed systems are therefore used in several contexts in Belgium. For instance, a mixed financing system for clinical biology and medical imaging is used since 1988 and 1991, respectively.[285] These activities are partly financed via a fee-for-service system, partly via a flat rate per admission and per day. In 2018, a pay-for-performance programme has been introduced in general hospitals.[286] However, the budget dedicated to the pay-for-performance scheme is still quite small (around 0.1% of the total hospital budget).[287] Also, since 2019, for hospital stays requiring a standard process of low-complexity care, a lump sum is paid prospectively and replaces the fees for medical providers. This bundled payment is distributed afterwards among physicians. This system concerns 57 groups of stays for which care varies little between patients.[288]

Despite the lack of consistent research findings, our literature review suggests that some studies show the promises of APMs in improving specific performance metrics when they create incentives for interprofessional or interorganisational coordination. Recent reviews also show that adopting a mixed provider payment system (MPPS) is the most promising approach to achieve integrated care. As part of this mix, it is suggested to have a “base payment” that represents most payment modes and that is not directly connected to value metrics (i.e. not VBP).

Based on the literature review, we can therefore propose some key elements to take into account for a future MPPS for Belgium. These are presented in Box 3.

Box 3 – Elements to take into account for a Mixed Provider Payment Mechanisms System for Belgium

The meso-level implementation anticipated as part of Belgium's health care reform towards integrated care, in the form of networks of providers covering a population within a defined territory/region, may share similarities with ACOs. Based on our review of international literature we could propose to include the following components (next to traditional PPMs such as FFS) in a MPPS for networks of providers:

- Combination of person-based (mainly primary care) and episode-based modes of payment, e.g. bundled payments (primarily to manage patient transitions between different care settings such as hospitals, home, nursing homes, etc.)
- Strong and broad base payment that allows for a person-based approach, especially in primary care (e.g. using payment per capita)
- Value-based payment, based on agreed-upon metrics that complement the base payment plan
- Some forms of shared savings (upside risk first, and later downside risk) at the meso level, and agreed upon by primary and second line care network providers.
- Some forms of payment for coordination (e.g. lump sum)
- Alignment between the different modes of payment ensured at micro level by the primary care teams and at meso level by a strong governance structure.

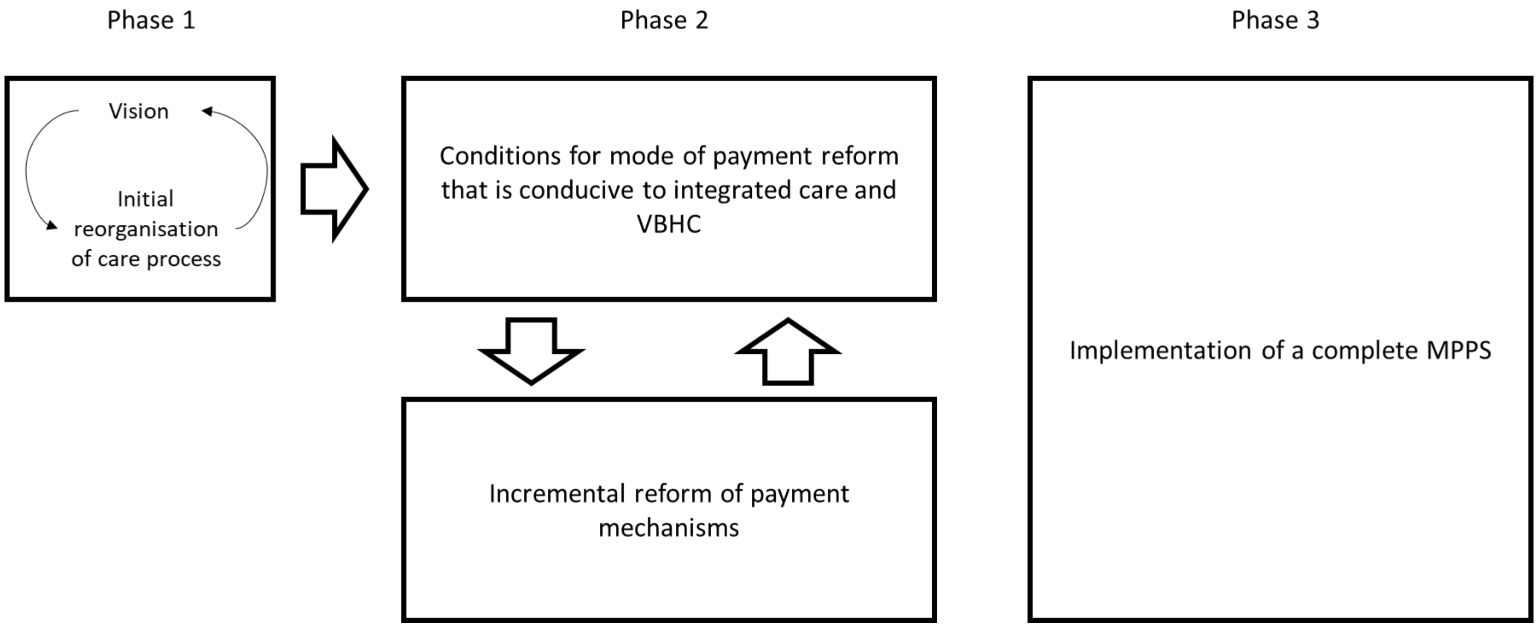
From the literature review, specifically the section on how to reform payment systems to support integration of care (section 1.1.1), it appears that there is the need for reform to be rollout incrementally. In addition, several preconditions are necessary for such reform to take place successfully. In the following sections we discuss these two elements and complement them with theoretical insights from related literature.

5.4.1 An incremental reform process

Implementing these new forms of payment is not just a matter of changing a contract. It is about radically changing the way health care is managed.

There are therefore two key elements to bear in mind when implementing MPPS (reforming financing towards an appropriate MPPS). First, there is not a universal mix but a mix that allows for an adaptation of the management of care networks in favour of more integration. This is highly dependent on the change process and the context. Second, as we have seen above, there is a consensus to say that the process of reforming financing should be incremental. As initial steps, it is often suggested to start with the reorganisation of the care process combined with the progressive search for a common vision among stakeholders. This should be followed by a gradual transition where fulfilling conditions goes together with an incremental financing reform. This process should then facilitate the implementation of a whole reform centred on that of a new MPPS. This is illustrated in Figure 14.

Figure 14 – Incremental reform process



5.4.2 *New mode of governance at meso level is indispensable to optimise Value-Based Payment reform*

Throughout the literature review, specifically in the section on how to reform payment systems to support integration of care (section 1.1.1), it became apparent that several preconditions were necessary for these reforms to take place successfully.

Among these, the existence of trust among stakeholders is a central precondition, particularly as it relates to managing risk linked to uncertainty about the success of the reform and its impact on individuals. Indeed, change always creates some level of uncertainty about how it will affect the different stakeholders involved. Uncertainty can lead to fear, and fear can generate fierce resistance to proposed changes.[289]

Consequently, a mechanism must be established to provide reassurances to all parties involved and help them overcome this resistance. They need to be assured that a new system will not be introduced at their expense and that they will not be left impaired or worse off by the changes implemented. They need to be confident that changes will not negatively impact their position and that their respective interests will still be protected.

With this in mind, the concept of "integrative negotiation" appears as an effective means to reduce uncertainty (see Box 4).

Box 4 – The concept of integrative negotiation

In essence, integrative negotiation is a win-win type of negotiation where parties collaborate to reach a mutually satisfying agreement.[290 291 292 293] Integrative agreements, in contrast to distributive/competitive ones, reconcile the interests of both parties, and lead to higher joint benefit than those created by a simple compromise.[294, 295] The integrative process, where parties identify joint interests and work towards goals that are not mutually exclusive, involves the creation and discovery of mutually beneficial options that allow everyone to walk away feeling like they won something.[296] Through an exchange of information, parties involved can better appreciate each party's requirements and priorities. In doing so, everyone gains a deeper understanding of each other's interests, and can jointly engage in integrative negotiation to arrive at a mutual agreement that satisfies the needs and concerns of all.[296] Furthermore, several researchers stated that integrative negotiation is achieved when *"the extent to which the negotiated outcome satisfies the interests of both parties in a way that implies the outcome cannot be improved upon without hurting one or more of the parties involved"*, reinforcing the hypothesis that integrative negotiations, as an underlying mechanism, may provide a guarantee to reluctant parties involved that the change to a different and new system will not negatively impact or disadvantage them.[293, 295]

Findings show that trust is an indispensable element for integrative negotiations, as it appears to be the case for implementing funding reform for a better integration of care.[292]

Trust can be defined as "*a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another*".[297] According to the literature, creating a safe and trusting environment fosters opportunities for integrative negotiation, which in turn allows protagonists to develop mutually beneficial solutions.[292, 298]

As a matter of fact, "**trust allows negotiators to exchange the information necessary for integrative agreements** *because trusting negotiators believe their counterparts will use information to identify mutually positive outcomes. As a result, trusting negotiators exchange more information about preferences and priorities and achieve more integrative outcomes*".[293]

Another determinant to achieve integrative negotiation is the need for both parties to delve deep into the negotiation and identify underlying concerns.[296] As mentioned previously, parties need to gain clear insight into the priorities and interests of the other parties to be able to really grasp what is important for each of them and on which aspects each puts the greatest emphasis. Lewicki and Stevenson (2013) stated that identification-based trust is a type of trust in which parties *"effectively understand and appreciate the other's wants"*, and is characterised by a mutual understanding and identification of each other's needs and an effort to ensure that others achieve their objectives.[297] According to some, this form of trust is often seen in integrative negotiation, and "*particularly* *between parties who know each other very well, and who not only have individual goals to achieve but also define and work to accomplish joint goals".*[297]

Given that trust is an essential and necessary determinant of integrative negotiations, it is interesting to know what could foster an environment that allows parties to create mutual trust and collaboration. According to a knowledge-based model of trust development, **repeated interactions serve as a key mechanism for trust formation** in organisations, and some also simply argue that repeated interactions increase trust and reciprocity with or without information transparency.[299] [300] There is experimental evidence in game theory that demonstrates how the dynamics of repeated interactions provide a context that helps and enhances the development of secure trust and lasting cooperation. Moreover, it suggests that stable mutual cooperation often depends on individuals having the opportunity to build a strong cooperative relationship through cooperative meets, and that the prospects of cooperative and trusting behaviours are incentivised by the anticipation of long-term reciprocal benefits when there is a high expectation of repeated interactions.[301]

With the same end in view, some argue that an important outcome predicted by social exchange theory is the emergence of trust in various repeated exchanges.[302] Gouldner also argued that over time, the social exchange process becomes influenced by "the norm of reciprocity" whereby each party feels obliged to reciprocate positive acts by the other party, thereby reinforcing levels of trust, according to Guest (2016).[296, 303, 304] Based on this, Korsgaard et al. and Lu et al. argued that **trust is built through a process of reciprocal exchange and mutual influence that negotiators have toward one another**.[296]

Keeping in mind the conceptual developments described in Box 4, it is interesting to put into perspective some of the results described in previous paragraphs of this review. The need for a trusting relationship between stakeholders was indeed cited several times. The relevance of working with "small regional ACOs" was also mentioned, precisely to build trust. This makes sense: as underlined in the theoretical approach described in Box 4, repeated interactions between professionals of the same organisation (or network of organisations) should allow trust to build, which in turn eases the exchange of information regarding stakeholders' preferences, thus facilitating the negotiation and identification of an optimal solution. And this principle of negotiation is even more crucial with APMs that integrate elements such as shared savings, bundled payments or population financing, since everyone will need to agree on the redistribution scheme among service providers.

Applying the concept of integrative negotiation to the process of integrating care reinforces the argument for encouraging discussion at the local level to build the system, particularly in terms of financing. Of course, not everything can be done at the local level, and this is no less true in the case of financing reform. But some points, such as the distribution of a bundle payment or the surplus generated as a result of the reform, can be discussed at the local level. Moreover, we have so far limited our discussion in this section to the financial aspect of payment reform, however, other arguments are to be considered which will also come into play in the negotiation. For example, the health of the overall population served and one's approach to care for that population, one's position in the system or the value they may attribute to collaboration, to name a few. Here again is another example of the need to negotiate at the local level to allow for a more accurate and specific view of each other's preferences and arrive at an optimal solution.

6 TRANSITION PATHWAY FOR FURTHER IMPLEMENTATION OF INTEGRATED CARE IN BELGIUM

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Key findings

- **Since implementing integrated care requires a complete systemic transition, formulating a number of isolated, stand-alone actions is insufficient to make this transition. Therefore, during the discussion groups, stakeholders proposed a comprehensive set of actions covering a wide area of sectors and embedded in an overarching vision (see chapter 4). The multitude of actions suggested by the consulted stakeholders, together with the results from the literature review on financial reform (see chapter 5), highlighted the need for a phased approach to implementing integrated care, a transition pathway with incremental reforms in order to meet the demands of this very ambitious and complex transition process.**
- **The numerous actions proposed were rich and comprehensive, but required a more in-depth approach. To this end, we sought the input and feedback from experts on a proposed transition pathway and via expert groups ("World Cafés") focused on governance, financing and establishing a learning community.**
  This process resulted in a consensus of identified topics/actions/fundamental pillars among the consulted experts: value-based care through a person-centred and population-based approach, a place-based approach by strengthening primary care combined with care pathways, access to individual and population-related data, the development of funding schemes that encourage integrated care, and a strong governance at the local health system level and at the macro level.
- **As a first step, the stakeholders expressed the need for a clear framework at the macro level: this includes the need for decisions made by all the government(s) regarding priorities in place and changes to be implemented (who is responsible, what are the objectives, etc.), and fostering the conditions necessary to enable partners to move the transition towards integrated care (e.g., establishing a clear framework of action with sufficient flexibility to adapt to specific situations and needs on the field). Devising an inter-federal plan was seen as an essential step to coordinate the different entities by way of a legislative framework that defines a strong governance structure in the context of a shared vision of integrated care.**
- **Consulted stakeholders also agreed that a territorial approach is necessary, with coherently defined territories responsible for:**
  (1) supporting the development of a population-based approach in which health care providers/organisations are responsible for organising/providing care across the care continuum for a defined population;
  (2) facilitating interprofessional and intersectoral collaboration;
  (3) guaranteeing the quality of care.
- **Therefore stakeholders proposed to have a governance structure in place that can oversee the above tasks, with the necessary access to and understanding of population-related data, and that have clearly defined understanding of each party's roles and responsibilities within the governance structure and vis-à-vis the patient.**
- **Stakeholders also emphasised the importance of reforming the financing system, and proposed an incremental financial reform towards a mixed model financing system. This reform has to be preceded by research to assess the feasibility of increasing capitation for primary care professionals as part of the provider payment mix. According to the consulted experts, an initial investment will be necessary to be able to enhance multidisciplinary collaboration and strengthen and structure primary care system, including patient representation.**

- **Although some options were provided, the *World Cafés* did not result in clear guidance on the required/desirable size of the territories, or how to balance a population-based approach with patients' freedom to choose their healthcare providers, etc.**
- **Discussions held during the World Cafés centred more around the different options to effectively implement governance, stimulate learning systems and adapt financing, than around the theoretical principles themselves. Nevertheless, these discussion groups with experts did not result in clear-cut and concrete actions, but rather helped to identify points of interest, new questions, and demonstrated that establishing a framework and guidance is necessary to be able to formulate actionable policy measures.**

6.1 Introduction

This chapter presents an in-depth exploration of certain topics chosen based on their relevance to political decision-making. For instance, topics such as digital care and a plan to support the development of e-Health were not chosen because there are several already on-going plans and projects on these topic. The maturity study (see Chapter 3) showed that transitioning towards integrated care has begun, but is still in its initial phase. In addition, the modes of payment for integrated care proved to be the most important theme for the participants who completed the questionnaire. The interaction with stakeholders in the 16 discussion groups allowed us to identify many action points needed to further implement integrated care. In Chapter 4, we presented a blueprint, drawn up using the Viable Systems Model by Stafford Beer176), on how to structure the different action points.176 This was complemented by a literature study on the financing of integrated care (see Chapter 5), which also pointed to the importance of building trust between all actors involved and highlighted the need for the gradual implementation of new models. The many different dimensions of integrated care, the plethora of ideas on actions in the discussion groups, and the literature on incremental reforms, prompted the researchers to build a transition pathway based on the theory of change developed by Weiss et al.305) This is an approach that describes, in a logical way, how complex interventions can achieve results. This approach begins with defining the expected final results and works backward to develop the change process, itself made up of intermediate changes.306) The researchers drew on the principles of this methodological approach to construct the transition pathway towards integrated care in Belgium. This approach, which was developed to conceive and initiate change, is used with a systemic lens.

Developing a theory of change includes the following steps:

- Defining the final (long term) results (i.e., what are we trying to achieve with integrated care?)
- Defining activities and strategies (i.e., which activities must be done in order to achieve the desired end results?)
- Defining assumptions and hypotheses (i.e., how should the activities lead to the expected results i.e., transition pathway?)
- Analyse the context (i.e., how does the environment affect the development of the activities?)

Due to time constraints, it was not possible to develop a complete theory of change. Therefore, this chapter only aims to:

- Propose a general frame of activities in a phased approach, based on results presented in previous chapters (preparatory phase) and challenge them with stakeholders
- Add further details to some activities

The development of the transition pathway is limited to the phased approach of activities. Developing a logic model explaining how the activities lead to the expected results and the context analysis are not included in the scope of this project.

6.2 Methods

6.2.1 Preparatory phase: transition pathway

According to the theory of change, the research team drafted a transition pathway that was submitted to stakeholders for critical review. The many different dimensions of integrated care, the plethora of ideas on actions in the discussion groups, and the literature on incremental reforms, incited the researchers to work with a transition pathway in three phases connecting the proposed actions to a timeframe. These three phases, as explained in the following paragraphs, stemmed from elements extracted from the previous chapters. These elements are presented below, while the details of each phase are presented in the Results section.

The first phase (Phase 1) is the creation of a well-defined framework, based on a clear vision of integrated care (the latter needs to be better formalised, explained and communicated to stakeholders). It is the opportunity to refocus various initiatives and pilot projects in line with the fundamental pillars suggested by the stakeholders, and on which the transition to integrated care must be built: value-based care through a person-centred and population-based approach, a place-based approach by strengthening primary care combined with care pathways, access to individual- and population-related data, the development of funding schemes that encourage integrated care, and a strong governance at the local health system level and at the macro level (see Chapter 4 – Tables 51, 52 and 53). As shown in Table 37, the discussion groups also identified a series of barriers to the development of integrated care (e.g., the lack of a very concrete long-term vision, the lack of coordination between the different competence levels, the inconsistent distribution of competences between the federated entities and the federal level, the lack of specific competences for the development of integrated local health systems, etc.). These point to the need for alignment between the different levels of authority. The literature review (see Chapter 5) also highlighted the necessity to first start with the reorganisation of the care process intertwined with the progressive search for a common vision amongst the different actors. The ambition of this first phase is therefore to create a clear framework for the transition to integrated care (top-down approach to support health providers and local health systems but guided and inspired by the needs and experiences of the field).

In the second phase (Phase 2), the research team recommended that actors build on the framework proposed in Phase 1 to gradually adjust existing initiatives and develop integrated local health systems. The barriers identified by participants in the discussion groups (see Chapter 3), emphasised the need to build change gradually:

> ***"-Verandering vraagt tijd!; Voorzie voldoende tijd, wees geduldig; Besef dat dit geen eindpunt kent maar een mindshift is; Vaak slow return of investment; Er wordt te veel verwacht van één project, heeft tijd nodig, moet opbouwen;***
>
> ***' Lors de lancement de nouveaux projects: souvent logique de controle et d'efficacité à court terme. "***

Group discussion participants also expressed the need to enter into a learning system, meaning learning should be at the centre of strategies to improve performance.

> ***"Transfert de connaissances est important, échanges entre acteurs impliqués dans l'innovation, communautés de pratiques=pratique prometteuse pour avancer vers changement"***
>
> ***" Bereidheid tot veranderen faciliteren betekent ook toelaten dat er vergissingen, fouten gebeuren. Dit is een leerproces voor iedereen. Dit heeft tijd nodig, die tijd en ruimte moet er zijn."***

This means evaluating the process and not only the results/outcomes and learn from each other.

> ***"Evaluatie van de processen, niet alleen de resultaten"***
>
> ***"Manque de porosité des structures pour apprendre de l'autre (trajet de vis ma vie et/ou détachement de personnel")***

The literature review (see Chapter 5) also identified, as a second phase, the importance of a gradual change where meeting the necessary conditions goes hand in hand with incremental funding reform. Therefore, the ambition of this second phase is to progressively develop integrated local health systems (with their own governance) within defined territories (including primary care networks, hospital networks, mental health networks, etc.), starting with a reinforced primary care (bottom-up approach). This process should allow the implementation of a whole integrated health system, for which the foundation/blueprint was laid out in Phase 1.

The third phase (Phase 3) of the transition pathway proposed by the research team, therefore, corresponds to the maturity phase of the system. However, following the incremental logic, this phase is not the last one. In line with the logic of incremental reform, the literature review in this study which focused on financial reforms, considers funding reform as a supporting and complementing facet of the ongoing process of redesigning the process of care, building provider and payer capacity, and building trust within the collaborative network.

This transition pathway (see supplement) formed the basis of the discussions with expert groups (World Café) to choose the topics to consider and structure expert input.

The first version of this transition pathway can be found in the supplement. This version was sent to the participants of the World Café before the meeting. They were asked to go through it thoroughly and give their feedback.

All the feedback was put together, and points that required clarifications or additions were identified. These elements were first used to prepare the World Café discussions. After those were held, they were integrated to the World Café comments to propose a shorter and summerised version of the transition pathway (see Results section below). Some feedback was not included as it fell outside the scope of our questions (e.g., advocacy for the desired role of a stakeholder at the meso level).

6.2.2 Data collection tool: World Café

The "World Café" method [307] was used to discuss three selected topics: governance, financing, and learning system, as they were mentioned several times during the discussion groups reported in Chapter 4. The World Café provides an opportunity to collectively explore different ideas and solutions to problems, issues and challenges previously raised, and generate new ideas, directions or vision statements. It facilitates breaking away from a linear work logic and helps think outside the box [308]. In other words, it works on the assumption that more heads generate more ideas and makes it possible to bounce them around and use others as sounding boards.

Concretely, each group was asked what was needed to make a breakthrough, in the short term, in the areas of finance, governance and creating a learning system (see Table 59). More specifically, the first group formulated a number of proposals and delved in detail into a topic, which the second group could then work on further. The facilitator gave a short summary of what was previously discussed and proposed and then asked for the second group's input. The group could then discuss whether they agreed or disagreed with the proposals made and could propose adjustments, elaborate further or formulate new proposals. This was done three times, once per topic. In the fourth and final round, the first group was told what the other two groups had discussed and could then put together a final proposal. After these four rounds were completed, all the proposals were presented to all groups as a whole. Their ideas were inserted in Mural® (an interactive online board), and audio recordings were made which were only used if some elements discussed required clarification.

The goal was to generate solutions by inviting participants to think further on the proposals made by others. This method makes it possible to develop more comprehensive actions and increases the chance of acceptance, as the work is mainly based on the proposals already made. The danger with this approach, however, is that the proposals can be of limited quality. However, we tried to overcome this by selecting participants with specific expertise in the field of integrated care. Moreover, whenever possible, participants were asked to start in the group in which they had the most expertise.

Table 59 – Overview of the different rounds of the World Café

	Finance	Governance	Learning system
Round 1	Group 1	Group 2	Group 3
Round 2	Group 3	Group 1	Group 2
Round 3	Group 2	Group 3	Group 1
Round 4	Group 1	Group 2	Group 3

6.2.3 *Recruiting the expert panel*

We aimed to involve participants with expertise in the field of integrated care (e.g., coordinators of an integrated care project) or in one of the specific topics discussed (e.g., financing, population management, patient participation, etc.). Participants were identified based on their expertise and not on the sector they represent. In addition, we also felt it was important to think from a meta perspective rather than purely from the vantage point of defending interests. Together, the research team and the KCE team drew up a list of possible participants. The presence of experts from Brussels, Flanders, Wallonia, and the federal level was taken into account. A total of 81 participants were identified (Table 59), most of whom were tied to universities or knowledge institutions, or people who had developed specific expertise by way of their profession/role. The fields of expertise that were considered were primary care, governance, hospitals, finance, and legislation. All the targeted participants received an invitation via e-mail, asking them whether they were interested in taking part in an expert panel including the time needed beforehand for them to prepare ahead of their participation.

Table 60 – Invited experts

	Dutch-speaking	French-speaking
Public administration (e.g., Aviq, VIVEL, FOD)	13	10
Researchers/Universities (linked to guidance in ongoing reforms)	18	5
Integrated care projects	7	5
Members of the ‘Integrated care’ working group	1	1
Sickness Funds	2	5
Patient representatives	1	2
Hospital sector	2	2
Others	1	6
Total (N=81)	**45**	**36**

6.2.4 *Developing the expert panels*

The overall goal of these expert meetings was to come up with a set of concrete actions to further develop integrated care. In Chapter 4, the various necessary actions were already listed and linked to the Viable Systems Model.[176] The aim of the expert meetings was to home in on some of those actions. Since implementing integrated care requires a complete systemic transition, formulating several isolated, stand-alone actions is insufficient to make the transition. For this reason, we decided to focus on three key aspects to clarify the next steps and critical linkages. To determine these key aspects, we sought input from experts on the transition pathway (see section 6.1). Based on their written feedback, together with the input from the previous phases of the study and the expertise of the research team, we decided to work along the lines of two major themes: strengthening primary care, and the relationship/collaboration between primary and secondary care. Within these two topics, the areas of financing, governance, and creating a learning system were further elaborated.

Two evening meetings per language were scheduled and took place online. Each meeting lasted three hours and both the Dutch-speaking and French-speaking groups discussed the same topics. The first meeting focused on strengthening primary care while the second meeting focused on the relationship between primary and secondary care. The online collaboration tool "Mural" was used to structure the meeting and take notes. After a short introduction, the three different aspects within the chosen topic were discussed in smaller groups. Finally, there was a plenary exchange about the different proposals made, and a final wrap-up.

6.2.5 *Analysing and interpreting actions*

The input obtained on the transition pathway and during the expert meetings was processed and analysed. Due to time restrictions, we didn’t use specific software for this purpose. We worked based on a summary and internal discussions. All the comments were put together and reviewed to determine which elements were agreed upon or not, and what additions, if any, could be made. The input provided by the different groups during the World Café sessions was summarised and then examined to highlight the similarities and differences between the discussion groups. The results will also show if there was no consensus among the participants.

6.3 Actions for further implementation of integrated care in Belgium

Disclaimer: This section is based on the analysis of the written input received by experts as well as input collected during the World Café discussions. However, it was not possible to compile an exhaustive list of the input in order to have a reworked transition pathway. Moreover, not all topics could be covered in full detail during the World Café sessions, and no real consensus was obtained. Therefore, these views cannot be considered as representative of all stakeholders involved in integrated care.

6.3.1 *Input on the transition pathway*

We reached out to 81 experts. Twenty-eight of them gave their written input on the transition pathway (see supplement for the first version of the transition pathway), of whom 11 were French speaking and 17 were Dutch speaking (see Table 60). Overall, the proposed pathway had mixed reviews. Some people spoke of an ambitious proposal where gradual introduction is desirable. Others felt it is too theoretical or that there is still too much room for interpretation. Some were also critical of the transition path, pointing to the long road already taken and skeptical as to whether this study can contribute to change; instead, those participants felt the government first needed to make clear decisions to move forward.

> ***"Je crois que les objectifs généraux ne sont pas assez définis et limités. Le scoop me paraît trop ambitieux et risque de s’enliser dans des discussions interminables vu l’ampleur. Je plaide pour la sélection d’un objectif général plus limité et rassemblant un grand consensus."***

> ***"Men moet nooit proberen verandering tot stand te brengen op basis van consensus: dan geef je aan één actor de macht om een proces stil te leggen. Wel moet er een significante ondersteunende meerderheid zijn. De vraag is of de tijd nog rest voor een ‘stap voor stap’-benadering."***

> ***“Opletten voor veranderingsmoeheid lopende en moeizame/trage hervormingen die bezig zijn (werken met gezondheidszorgdoelstellingen en meerjarenbegroting, nomenclatuurhervorming, pas gestarte ziekenhuishervorming, digitalisering, het ontwikkelen van zorgpaden en zorgtrajecten…), als de tastbare meerwaarde onvoldoende snel volgt op de verandering. Moeten we niet kleinschalig beginnen met iets dat niet te complex is.”***

> ***“Er zal een belangrijke draagvlakoefening nodig zijn om van AS IS naar TO BE te gaan. Dat zal met kleine stapjes moeten gaan.”***

> ***“De ervaring leert dat het zeer eenvoudig moet worden aangeboden aan zorgverleners en zorgorganisaties, of niemand gaat mee in het verandertraject. En er is een sterke backoffice nodig die het hele proces ondersteunt,”***

6.3.2 *Expert meeting participant profiles*

Of the 81 experts contacted, 36 participated in at least one of the four World Café sessions (2 in Dutch and 2 in French). Twenty eight also gave written input on the transition pathway, and 6 participated in the discussion groups reported in chapter 4. The subject of strengthening primary care was discussed with 26 people, and the subject of the relationship between primary and secondary care was discussed with 24 experts (see Table 60). Fourteen people participated in both meetings (9 Dutch speakers and 5 French-speakers).

Table 61 – Number of experts who gave input and participated the World Cafés

	Written input on trajectory of change		World Café: Strengthening primary care		World Café: Link primary and secondary care	
	FR	NL	FR	NL	FR	NL
Public administration (e.g. Aviq, VIVEL, FOD, …)	2	1	3	2	4	2
Researchers/universities (linked to guidance on ongoing reforms)	2	8	1	7	/	5
Projects on integrated care	2	4	2	4	2	4
Sickness Funds	2	2	1	1	1	3
Patient representatives	2	1	1	1	1	/

Community health centre	/	/	/	1		1
Hospital sector	1	1	2		1	/
Total	**11**	**17**	**10**	**16**	**9**	**15**

6.3.3 The fundamental pillars of an integrated health system in Belgium

In this section, results from the World Café were combined with the results of the previous chapters and the written comments on the transition pathway.

Throughout the various phases of the study emerged different fundamental pillars for achieving integrated care. They are:

- The development of value-based care through a person-centred and population-based approach.
- The development of a place-based approach (see glossary) by strengthening primary care in combination with care pathways (prerequisite for the development of the population-based approach).
- The access to individual- and population-based data to inform place-based approach.
- The development of funding schemes that encourage integrated care.
- A strong governance at the local health system level and at the macro level.

These pillars were further detailed in the transition pathway. According to the written comments on the transition pathway, the fundamental pillars seemed to be generally accepted. The discussion is more about the different options to effectively implement them than about the fundamentals themselves.

> ***“Wat we niet mogen uit het oog verliezen is de aandacht voor “equity”. Vandaag is er heel wat ‘inequity by disease’ en dat mogen we niet versterken. Uiteindelijk moet dit hele project leiden tot betere geïntegreerde zorg, en tot meer ‘connectedness’ en ‘social cohesion’.”***

In addition, there is also a strong demand for a clear framework (with sufficient degrees of freedom) from the health policy-makers within which actors can further develop integrated care. Based on elements extracted from previous chapters and the discussion during the World Cafés, the following paragraphs describe the pillars.

- According to the stakeholders, transition must focus on a value-based approach to care. First, value-based care is about putting a person’s life objectives (patients, informal caregivers, citizens) at the centre of the care process. It means investing in self-management, health & digital literacy, goal-oriented care and strengthening patient (or citizen) participation at the different levels of the health care system. Second, value based-care is also about developing a population-based approach to care.
- Stakeholders estimated that it requires the development of a place-based approach in combination with a care pathways approach. First, the development of a place-based approach implies strengthening primary care so that it is able to accompany individuals and a place-based population (i.e., population defined by the location they live in - neighbourhood, village, etc.) throughout the life-cycle (from promoting health, prevention and treatment of health problems, to ensuring proper quality of life). Indeed, a place-based population approach (see glossary) means a territorial approach of primary care provision.[309] Second, this must be strengthened by a care pathway approach.
- Participants reported that when a person's health problems cannot be treated and managed by the primary care level alone—usually due to specific care situations, or specific pathologies or risks—a care pathway approach should be developed, keeping in mind the importance of maintaining people’s goals at the centre of the process. These pathways favour the optimal transition of a patient between different providers and/or different care places (e.g., home, nursing home, hospital, etc.).
- Stakeholders stated that this should make it possible to better connect all of the care and social services and providers (e.g., primary care providers, other first line providers or services, specialist care, hospital, etc.).

- To achieve all of this, stakeholders acknowledged that having access to both individual- and population-based data is necessary, as well as developing the proper financial incentives to encourage integrated work (e.g., higher capitation-based funding).

Finally, combining a person-centred approach, a place-based population approach and care pathways for specific care situations requires the collaboration and mobilisation of different levels of authority and from different sectors and organisation levels. To manage this collaboration, it will be necessary to reflect on a governance in a defined territory of a local health system ("a meso level"). Furthermore, the division of competences between federal and federated entities should not impede integrated care. Stakeholders also mentioned that the current consensus-based decision-making model (where all stakeholders must be in agreement) is not effective for the deep system transformation needed to implement integrated care. At present, there is the perception that, for the sake alone of working towards a consensus, transition is moving slowly. The common vision should be share by a majority should share the same vision, but choices and decisions have to be made.

6.3.4 The reworked version of the transition pathway

Integrating the experts' written comments on the transition pathway and the elements derived from the World Café allowed to draft a summarised version of the components included in the 3 phases proposed in the trajectory of change. These components stem from the research team's analysis and was not verified or further discussed with the experts. Based on the analysis of the written comments on the transition pathway, we decided to withdraw the proposed timing for the 3 phases described in the transition pathway because there was no agreement between respondents. Some excerpts from the comments received are presented to illustrate the link between the trajectory of change and the comments received. Note that regarding the areas of governance, financing and the learning system, there is a more detailed proposal elaborated based on the World Café discussions.

Phase 1 - Create a clear framework for the transition to integrated care

As explained above, the ambition of Phase 1 will be to create a clear framework for the transition to integrated care, more specifically, the framework for the development of integrated local health systems. It is not a question of starting from scratch but rather structuring and building further on what already exists.

> ***"Als ik de temperatuur op het terrein rond protocl3, pilootprojecten, … goed meet, dan vraag ik me af of 'meer van hetzelfde' nu nodig is? Dé vraag is: moeten we verder met pilootprojecten werken, of gaan we voor territoriale voortgangstrajecten, waarbinnen eerstelijnszones hun ontwikkeling doorlopen, omkaderd door een 'learning community."***

> ***"Les seuls systèmes existants (sous-entendu au niveau de systèmes locaux de santé) sont les asbl des projets de soins intégrés ; il faut maintenant intégrer cela dans une politique de manière à ce que les parties prenantes fassent autre chose que d'observer et laisser faire. Il est temps de développer des moyens pour opérationnaliser cela avec une gouvernance qui puisse monitorer. Cela nécessite des équipes renforcées en compétences."***

This phase should result in an **inter-federal plan** with a clear and shared renewed commitment to integrated care on the part of the Federal Government and the federated entities, and which should translate to the strengthening/sustainability of some actions already underway.

This plan should first of all specify the **general objectives of integrated care**. Based on what has been described in this study as the fundamental pillars of integrated care, the framework for the development of a **person-centred** and a **population-based approach** should be established.

This requires combining the development of a territorial approach to care provision (through the strengthening of the primary care) and the development of a care-pathway approach to connect primary care with other structures (hospitals, etc).

As a **pre-requesite**, this plan should see the **organisation of primary care according to a territorial logic:** for the provision of care, territories based on the living area ("bassin de vie", "leefomgeving") within the local health system; and larger territories ("meso level") for the management of inter-organisational collaboration. The latter constitutes the local health system, with a governance structure to be defined.

> *“Bij de governance moet meer expliciet gedacht worden over het juiste "regionale" niveau waarop de beslissingen genomen worden. De eerstelijnszones (zoals nu in Vlaanderen operationeel) werken uitstekend, maar zijn te klein om voldoende aan te sluiten, bv. bij de ziekenhuisnetwerken. Hoe moeten de beslissingen op verschillende regionale niveaus op elkaar afgestemd worden? Daarmee samenhangend: hoe groot moet/mag de vrijheid van de lokale entiteiten zijn, bv.? bij het uitwerken van nieuwe financieringsmechansmen.”*

> *“Viser un « bassin de vie » qui est plus naturel et qui permet de gérer une population en fonction de ses réels besoins.”*

Based on this organisation, the plan should clarify the link between hospital networks, primary care (territorial) networks (including support structures for frail elderly people), and mental health networks. This is an essential facet of a shared governance at the level of local health systems and the plan should include a **draft governance to this effect**. To support governance at the level of local health systems, this plan should include guidelines on the responsibilities of these structures. It will be necessary to find the right balance between an adequately defined framework and sufficient management autonomy so that each local health system can adapt to its context and the population for which it is responsible. In other words, this "top-down" framework must serve as a support for a “bottom up” development.

> *“De weg naar geïntegreerde zorg is een hele lange en hobbelige weg. Door van alles en nog wat te doen, zal er uiteindelijk vanalles maar niets gebeuren. Er moet dus een duidelijk loco-regionaal plan zijn per regio, een sterke back-office met coördinatoren en coaches die de zorg goed kennen, er moet een population health dashboard komen waar zorgverleners zelf hun zorg kunnen monitoren, goed uitgebouwde communicatie- en gegevensdelingssystemen en tenslotte een financieringssysteem dat belonend werkt. Maar de zorgverleners moeten zelf het stuur kunnen vastnemen. En het argument daarvoor is dat de zorg en welzijnswerkers het dichtste bij de patiënt staan en dus in staat moeten zijn om zelf de zorg op maat te organiseren in een buurt/wijk voor de mensen die wonen en leven in de buurt. Ik hoop dat vooral dit aspect in de hele benadering kan beklemtoond worden. Daarom zijn de eerstelijnsnetwerken (alias buurtteams) zo belangrijk.”*

> *“Geleidelijk aan gaat niet werken, hoog tijd om schoon schip te maken. De verschillende culturen in Vlaanderen en Wallonië vragen om verschillende aanpak, geef middelen op basis van inwoners en zorg dat deelstaten zichzelf kunnen regelen. Hospitalocentrisme werkt niet, echte dialoog met en versterking van eerste lijn nodig, zorgpaden reduceert mensen tot stukjes nood aan holistische visie, laat eerste lijnszones de kans om te bewijzen dat het werk en blijf van de indeling ervan af.”*

Decision-making at the local health systems level needs to be supported by the provision of **population-based data** and **dedicated funding**. Both should be detailed in the plan. The markers for **incremental funding reform** must be laid down in the plan. This includes substantial initial funding to support the development of governance at the local level and to foster inter-professional and inter-organisational collaboration, thus building trust within the networks.

Furthermore, it is also necessary to identify which legislation needs to be amended in order to enable implementation of the plan. A **preparatory legislative action** should start here.

The plan will also provide a clear framework that encourages learning and innovation within local health systems, while guiding the process of documentation, evaluation and exchange of good practices between local systems. In other words, this plan should set the framework for a **learning system** at the different levels (policy level, local health system level, and patient interaction level) by building on existing initiatives and involving all stakeholders (including patient representatives).

Phase 2: Building on the framework for the transition to integrated care

As explained above, in the second phase, health system partners build on the framework proposed in Phase 1 to **gradually develop integrated local health systems in a territorial approach**.

> *“Als men de burgers en actoren vertrouwt, dan moet het proces ondersteund worden.”*

The outcome of this phase should be the **progressive implementation of local health systems,** within which a strong and structured primary care works hand in hand with the other health and social partners to accompany the population living in the territory, in all of its health aspects (i.e., health in all policies).

The development of integrated local health systems should be based on structuring and institutionalising existing initiatives or launching new ones that reinforce a person-centred approach and a population-based approach as ways of operationalising value-based care.

First, these initiatives should facilitate the development of a **territorial approach** by strengthening the primary care. Structuring primary care this way enables the negotiations meant to **facilitate the transition** between other providers or places of care in the local health systems.

These negotiations (organisational and financial) are an integral part of the tasks of governance at the local health system level. Indeed, **governance at the local health system level** must promote inter-organisational and inter-professional collaboration and quality of care. This requires, among other things, making decisions based on population data.

Structuring this governance requires **developing/strengthening the skills and knowledge** of health system partners. For example, data management and analysis skills, negotiating with the different networks decision-making based on the needs identified; and there should be no representation from a specific professional group but rather from a whole network (e.g., primary care, palliative care, mental health, ...).

Finally, in parallel with this structuring process, it will be necessary to initiate an **incremental funding reform** so that new funding modalities can adequately support a new organisational model and new ways of collaborative work. A **legislative** framework will also need to be formulated.

Phase 3: Implementation

The third phase of this transition pathway therefore corresponds to the maturity phase of the system. This consists of the **implementation of the mixed system of provider payment mechanisms**, the **institutionalisation of governance at the local health system level,** and the assumed **development of the learning system**.

> ***“Één punt is dit bereiken, daarna mag opvolgen en blijvende evaluatie en verbetering van de geïntegreerde zorg niet vergeten worden.”***

6.3.4.1 Focused discussion on governance, financing, learning communities based on the input received during the expert meetings (World Cafés)

This section proposes to focus on three specific elements: governance, funding, and the learning system. The proposed actions stem from the outcome of the World Café discussions. During these sessions, the participants’ discussions started from the actions formulated in the transition pathway with a particular focus on elements highlighted in the written comments. They were asked to go into greater detail and give concrete form to these actions. The World Café method was used as a co-construction tool The first group formulated an initial proposal which was then commented on and modified by the other two groups before being reviewed again by the first group. This gradual addition to the original idea worked well, , except for some points. These are explicitly noted in the following text, as well as some differences of opinion between the French- and Dutch-speaking groups.

The World Café discussions focused on the three themes mentioned above. In addition, as the ambition of the report is to produce policy recommendations, the discussions focused on phase 1 of the transition pathway. In other words, what framework would be needed in terms of governance, financing and learning systems to support the bottom-up development of local integrated health systems in Belgium?

In order to maintain a legible and understandable message, the text does not include quotes, and the reader can find a summary of the different interactive online boards (Mural®) used during the World Café in the appendix (See supplement).

Governance

Following the participants’ recommendations, the governance of local health systems has to be organised around at least two levels of nested territories. The first level, the living areas, comprises the territories which allow the development of a neighbourhood approach. They, in turn, are established within the territories of local health systems; that is the second level. This report proposes a generic description of the elements which constitute the two levels of governance as proposed by the participants in the group discussions (Chapter 4) and World café sessions (Chapter 6).

Above these two nesting territories, the French-speaking World Café participants proposed that a regional umbrella (Walloon, Flemish and Brussels Region) should be created or further developed to support local governance structures in certain technical aspects (e.g., data management and analysis) and to cross-reference the knowledge and experience of the various local health systems.

Depending on the region, the size of these territories, the number of levels of nested territories (neighbourhood teams, first line networks, primary care zones, regional care zones) and the distribution of competences, the governance of these different territories might vary (see below).

Neighbourhood approach

Which territory?

This first level should comprise a territory small enough to enable all the service providers who accompany the population living in the territory to get to know each other. There is **no consensus on the exact size of this territory**. Some World Café participants proposed territories with 5,000 residents in rural areas and 10,000 in urban areas. Others did not consider the size of a territory based on the number of users but on the number of providers. To this end, they used Dunbar's number (which corresponds to the maximum number of individuals with whom a person can simultaneously maintain a stable human relationship) and set the maximum number of partners in the primary care network to 120.

What is the objective?

According to the participants, the general aim is to put primary and community care at the centre of the health system. In this sense, the establishment of primary care networks or neighbourhood teams aims to overcome the fragmentation of primary care.

Which governance structure?

Participants explained that the neighbourhood approach is developed from **generalist (non-disease specific and holistic) and multidisciplinary primary care teams or networks**. In addition to the health and social professionals included in these teams or networks, the patients/citizens/residents of the neighbourhood are also involved in the decision-making and activities carried out by these teams.

They suggest that this governance structure should be defined by a **basic framework (common to all primary care teams/network)** which includes rules based on the goals to be achieved. It must allow sufficient freedom and opportunity to set priorities and must facilitate and allow different things to happen in different regions. So, it should combine top-down and bottom-up approaches. According to the World Café participants, this framework should specify the following points:

- Ensure the involvement of all partners in the primary care teams' activities and decision-making process (including citizens/residents/patients/informal caregivers), ensure that partners understand one another and evolve in the same direction, determine common objectives
- Set the rules for territory/population size
- Define who shares the responsibility for the health of a given population
- Define the terms of that shared responsibility by specifying how:
    - Remuneration is linked to the shared responsibility
    - Cooperation with citizens/residents/patients/informal caregivers is defined
    - Evaluation of the primary care teams/network and control mechanisms are determined
    - A single shared digital patient record and streamlined data registration are made mandatory to facilitate interprofessional collaboration
    - Partners can activate levers (funding, decision-making power) to intervene if there are gaps (for example, identified through evaluation)
- Clarify the role of local authorities

- Finance a coordinator or a coach to support the primary care team. Dutch-speaking World café participants spoke about having a coordinator (i.e., one person per neighbourhood). The French-speaking participants considered a coach (a neutral person), likely part of the local health system level and who could support several primary care teams/networks. In both cases, the coaches' missions are identical and include:
    - Mapping population and population needs
    - Organising moments of exchange with the different actors (for example, training sessions on topics identified by citizens or providers)
    - Implementing a system that facilitates citizen/patient involvement
- Define a way to evaluate primary care teams/network which support the development of these teams

This basic framework would therefore be necessary to strengthen the support to multidisciplinary primary care teams or networks (by offering them support, through accreditation, funding, adapted legislation, organisational models, etc.) and to encourage their formation and coach healthcare providers in managing a healthcare ecosystem.

What are the responsibilities of the governance structure?

According to the participants, primary care teams or networks have different responsibilities. They suggested the following points:

First, these teams play the **role of specialists** for the population to which they are accountable for aspects related to health in the broad sense. This role is no longer carried out by a single person, but by a team in order to guarantee continuity of care.

Second, they have to develop a person-centred approach with a particular focus on the development of care oriented towards a person's goals and experience of care. To this end, various actions were proposed during the discussion groups and the World Café sessions.

This requires the development/strengthening of specific skills and tools, especially at the level of the primary care teams/networks:

- Strengthen the skills of professionals by giving them the time and means (financial, organisational, etc.) to rethink their practice
- Give providers and patients the tools and methods to strengthen goal-oriented care (explanation tools for life goals, support plan, specific functions, etc.)
- Providing digital access to patients while working to mend the impact of the digital divide

This requires the involvement of citizens/residents/patients in the decision-making process and activities carried out by primary care teams/networks:

- Involving experts according to their experience in health care and welfare

This also requires strengthening citizen/resident/patient/informal caregiver self-management by:

- Working on health literacy
- Involving patients in collecting their personal health data (e.g., enter lab test results, life goals, side effects experiences, etc. in the medical record platform)
- Strengthening caregiver skills by way of specialised focus on and out-reach activities to the most vulnerable groups

Third, they need to develop a **population-based approach**:

- Specify the target population by encouraging citizens/residents to enrol in a primary care or general practice. Care structures should then develop a proactive attitude towards the target population, particularly in terms of prevention and promotion activities (for which primary care and general practices are incentivised), and this in co-creation with all stakeholders (including patients)

- Identify and establish a snapshot of available professionals within each territory, in order to assess the available skills. . In order for this snapshot of providers to be stay updated and current, some World Café participants suggested developing a reporting system that invites each service provider to identify themselves when they set up in a given territory
- Establish links between the patient/citizen needs and demands and the territory's health and social professionals

These previous three points require **facilitating interprofessional, interorganisational and intersectoral collaboration** when interacting with patients. This means:

- Defining the specificities of each profession, encouraging professionals to get to know one another, identifying the specific and common roles/functions in certain situations of greater complexity
- Creating more flexibility within care tasks, or task shifting between primary care professionals
- Organising data sharing between professionals and with patients, at the micro level, by supporting the development of a single electronic patient file, with the patients' informed consent

Furthermore, professionals will have the responsibility to **document** their interventions and keep records on their practices, to **evaluate** and analyse them in order to **adapt** progressively and best meet the needs of the target patient population.

Finally, they have the responsibility to **represent primary care teams/networks** to other primary care teams/network (e.g., within the local health system governance) and to other networks.

Local health system

Which territory?

There is **no consensus on the size of local health systems** and they are viewed differently in different regions. It is, however, very clear from the World Café sessions, that the size should be small enough to take into account a variety of different contexts, but large enough to be able to rely on a wide range of competences. In the Dutch-speaking World Cafés it was suggested that a territory of 100,000 residents would be adequate. In addition, local health systems must be large enough to enable cooperation with all networks (including hospital networks). World Café participants also highlighted that too many layers of governance would be detrimental and should be avoided, and that it is important to build on the lessons learned from experiences already underway.

What is the objective?

According to participants, the objectives of the governance structure at the local health system level are multiple. Firstly, this structure should support the development of the population approach. It should facilitate interprofessional and intersectoral collaboration. It must guarantee the quality of care. It must negotiate the resources allocated according to priorities. It should manage population data.

Which governance structure?

Participants recommended selecting a **team of people with multiple skills** to facilitate the governance structure at the local health system level. Indeed, to carry out its tasks and lead the change, this governance structure needs multiple skills, including:

- Technical skills: administrative, project management, data management (ability to link the results of analyses and real field work), IT/RGPD management, legal, etc…
- Relational skills: the team must be made up of people capable of connecting with field professionals, and acting as a relay so as to collect and process information that will be useful on the ground
- Ability to seek out knowledge and information from the appropriate sources and share it with the local health system. Patient organisations can, in some cases, be the relay for disseminating knowledge
- Coaching/pedagogical skills: the governance team at the local health system level could be responsible for coaching professionals at the neighbourhood level

As a point of reference, it has been reported that the German-speaking community viewed this governance structure to be operational on a territory with 78,000 residents, and should be supported by 7 full-time equivalents.

The participants suggested that the governance structure at the local health system level should ideally be **composed of people who represent networks** (primary care networks, hospital networks, mental health networks, etc.) and not professions, in order to avoid corporatism. These representatives should be democratically elected, and ideally, there should be a balance of professions represented among them. World Café participants highlighted that building governance structures with representatives of the different professions (rather than sectors) creates the risk that they will each want to privilege and take credit for their respective professions. They propose to design the governance structure based on the experiences from integrated care projects consortiums.

World Café participants proposed that governance structures have a **strategic plan** describing common principles for local health systems:

- A common finality of care
- How to achieve optimal cooperation; this requires specifying how existing governance structures (mental health networks, hospital networks) and future ones (primary care networks) will be articulated.
- Delineate and assign areas of responsibilities
- Identify the skills needed
- Have mechanisms in place that encourage stakeholders to be proactive within the governance structure. To this effect, World Café participants suggested, for example, that stakeholders become **shareholders**. However, they also cautioned that a financial commitment does not necessarily guarantee participation
- How to pool resources in order to reduce administrative burden and improve efficiency. For example, by grouping small facilities together in order to pool administrative tasks, and not only to save money.
- How the process is evaluated

What are the responsibilities of the governance structure?

According to participants, this governance structure is responsible for supporting the development of a **population-based approach**. As such, it supports strengthening primary care and encourages interactions between lines of care (through the development of care pathways, for example).

French-speaking participants in the World Café sessions suggested that the structuring of the territorial network could be supported by governance at the local health system level. They also considered implementing a coaching system at the local health system level, which would support the primary care teams (see previous section).

To encourage **interactions between levels of care**, World Café participants talked about a strategic care plan, developed by the local health system governance (i.e., the representatives of different networks). As explained above, this plan would set the guidelines for collaborative work between networks. And it should, among other things, facilitate the following actions (proposed by the discussion group participants):

- Support the structuring of contextualised care pathways to manage the transition between different care settings (hospital, home, nursing homes, etc.)
- Create spaces for structured exchanges between hospitals and the first line of care (specific funding should be provided)
- Use these exchange spaces to support the development of structured trans-mural care pathways for specific episodes of care by tying them to virtual payments (see chapter 5)

In order to achieve this properly, Dutch-speaking participants underscored the importance of aligning the different networks. In Flanders, for example, adjustments should first be made to align hospital networks with the primary care zones.

Developing a population approach also requires supporting the provision, analysis and mobilisation of **population data** in the decision-making process. Indeed, the creation of local databases on health care supply and demand aims to better organise care at the local level. On the supply side, discussion groups and World Café participants proposed to:

- Develop a database of services connected to a single point of information accessible to all (particularly through helpdesks). This should subsequently make it possible to clarify existing roles (e.g., difference between case managers and care coordinators)[80] and to identify any gaps. Note that the idea of creating a Helpdesk was not shared by all Dutch-speaking participants.

In terms of health care demand, they proposed to:

- Develop means to evaluate the provision of care by sharing up-to-date data, managed by the various partners of a local health system (hospital, home care organisations, etc.). This should subsequently include the possibility of consolidating population data from anonymised information extracted from individual medical records, into a local health system dashboard. This evaluation process involves all stakeholders, including patient representatives. The data required for this must also be determined.

Finally, all of the above actions require **management autonomy**, meaning that the local health systems are obligated to report results to the macro level (federal and regional authorities), but maintain autonomy in their decision process.

What are the prerequisites for setting up this structure?

Based on the participants' feedback, there are prerequisites necessary to set up this structure. One of those essential prerequisites for shared governance at the level of local health systems, is to clarify the link between hospital networks, primary care (territorial) networks (with clear and simplified structures), mental health networks and support structures for frail elderly people.

Participants insisted on the fact that the territorial organisation must be carried out independently of the division of competences between the levels of authority. It is then important to think about how to pool federal and federated resources. Adapting the legislative framework will be necessary in order to cross competences from different levels of authority within a collaborative work agreement.

Regional umbrella

The regional umbrella was mainly discussed during the French-speaking World Café sessions. In Flanders, such a structure already exists: VIVEL. Participants imagined a regional umbrella that would support the governance structures of local health systems in specific areas. The following are examples cited during the World Cafés:

- Coordinate/harmonise the use of data (individual and population). Data would therefore be centralised by an independent body which would bring together the necessary analytical skills.
- Develop a community of practice around governance issues: How to facilitate meetings/exchanges? How to make decisions together? How to document what is happening?
- Set up a learning system that would act as a cross-fertiliser between the different local health systems. Plan ways to communicate what has been discussed in the learning system (e.g., spaces for disseminating exemplary experiences, etc.), for example, by developing an electronic tool/platform that enables the recording of incidents and good practices.

Table 62 – Summary of governance section

General acceptance of stakeholders on	What remains to be defined
The development of a territorial organisation of the health system composed of two nested levels: the neighbourhood level, the local health system level	The size of the territories. Two key elements must be considered: mapping the specific needs of each territory and specific skill requirements
The need for a clear framework that defines responsibilities and maps out how the different levels of governance function at the neighbourhood level and local health system level	What framework should the different authorities develop, so that it is sufficiently prescriptive while giving the actors sufficient autonomy in managing and making decisions concerning the territory they oversee and are accountable to?

Neighbourhood level	
Encourage multidisciplinary primary care teams to support the development of a territorial approach: support the population living in the territory in areas related to health in the broad sense	Which framework can support the development of a territorial approach
Local health system level	
A governance structure facilitated by a multi-skilled team (in data-management, in change management, etc.) Representation of networks, not professions or sectors, in the governance structure Need to mobilise population-based data to support decision-making in local health systems	What size should the team be? What human and financial resources are needed? How to set up governance structures? How to align the territories of different networks? This question was highlighted in Flanders: Does it require revising the hospital networks? How the data will be collected, compiled, analysed and which structures will be responsible for this task?

Learning system

According to the participants, making the health system a learning system is a priority in order to build, strengthen and sustain the integration of our health care. The need for a learning system is reflected throughout the various phases of the transition pathway, acting as a driver for building a more integrated health system.

Why do we need to make our healthcare system a learning system?

Dutch-speaking participants made it very clear that it is necessary to move away from start-stop change management and successive waves of fragmented and temporary pilot projects. They insisted that the time had come to make decisions and act on them to move integration forward. On the other hand, French-speaking groups highlighted that some discussions may still be necessary before making any definitive decisions; they also expressed a desire to refrain from relying on pilot projects. Both communities agreed that we now need to build on past experiences and lessons learned, to develop new ones on a “try and make mistakes” basis, and to facilitate scaling up through learning and exchanging of good practices.

What are the ingredients of learning systems?

Both Dutch- and French-speaking groups agreed on the key components of an effective learning system: develop a quality culture, produce reliable data, provide support to learn and make improvements.

Dutch-speaking participants spoke about a framework that would allow the **development of a quality culture** that facilitates a continuous, thought-out dynamic of learning in care, at all levels of the system. They highlighted that healthcare providers already carry this quality awareness—driven by the achievement of the Quintuple Aim. This latent desire to learn and improve must be sustained and supported. French-speaking participants put more emphasis on the **adaptation of basic and continuous training** to strengthen the culture change and learning skills of providers.

For both Dutch- and French-speaking groups, learning systems rely on the **use of available, up-to-date and reliable data**, relating to both patients and the population as a whole. This is important in order to continuously feed the learning process and build progress. Population-related data must be available via a dashboard that can be fed and consulted by all partners, both in primary and secondary care.

French-speaking group suggested that building a population health dashboard, at neighbourhood level, local health system level, and macro level, is essential to:

- Carry out a diagnosis of "social/health" needs and organise the offer of services accordingly
- Monitor the impact of the system, and assess the extent to positively impacts population health

They stressed the importance of evaluating the impact of policy (when applicable depending on the stage of development of the programme or initiative). To carry out the impact evaluation, which in turn makes it possible to influence and steer public health policy across all levels, indicators have to be defined for each governance level. These should be different types of indicators to provide a comprehensive view:

- Structure, process and results indicators, indicators based on priorities identified when the organisation was set up by neighbourhoods, or as needs evolve;
- Satisfaction and experience of users and professionals when using the health system
- Quality of life of the population

Defining the indicators will initially be based on data available at different levels, such as health observatories, the inter-mutual agency, federal and regional authorities, etc. Analysing the data should make it possible to carry out an initial characterisation of the local populations and needs, and therefore of the services that need to be put in place. On this basis, more "local" indicators that take into account local specificities, can be developed in order to assess needs in greater detail and monitor the evolution of the population's health. It is therefore necessary to consider the cascading effect of the range of different objectives, at the different levels of authority: neighbourhood, local health system, regional, federal. The participants underscored the importance of sharing feedback with frontline workers regarding the monitored indicators (current situation, progress made, needs identified, etc.). The number of indicators should be limited, however, to ensure the good management, usefulness, usability, and understanding in the field (i.e., ensure they have meaning in relation to the practices and realities experienced by the various actors in the field). Some examples include poly-medication (rate of compliance with recommendations), the rate of overweight (particularly for early childhood), reasons for hospitalisation.

The support required to sustain continued learning and make improvements is the third key element identified by both groups.

The French-speaking group suggested the development of **exchange spaces** in order to stimulate peer learning, for example, by establishing **communities of practice** at different levels of the health system. Another idea was to create a tool to share feedback, such as a **platform for recording good practices and adverse events,** among local health systems, and between local health systems and the regional levels.

Both groups highlighted the role that the local health system level must play in supporting the neighbourhood level in the continuous improvement and implementation of the learning system. Indeed, many ingredients are needed to feed such a system. Some require specific skills, such as knowing how to use data, but are often lacking at the neighbourhood level. Integrating and/or reinforcing this aspect in the continuing training of professionals is a concrete proposal for which the French-speaking group encourage rapid implementation. However, both groups highlighted that it would likely not be possible to have the specialised technical skills for data management, and recommended instead, that relying on the skills at the local health system level to provide the support the neighbourhood level needs to collect, analyse, interpret and monitor data. The local health system level could also:

- Act as a third party to establish a dialogue with the neighbourhood teams
- Ensure transparency and problem identification;
- Make comparisons between neighbourhoods and facilitate the good practice sharing
- Organise structured exchanges on a regular basis to support the learning dynamic (Community of Practice)

During the Dutch-speaking World Café, participants proposed to create a team of “integrators. This would comprise a team of people who support other teams in fostering and solidifying a culture of quality, by coaching them and helping them with data usage, supporting team work, sharing best practices, ensuring consistency with policy and research institutions, facilitating communities of practices.

How to ensure the different partners participate in the learning dynamic?

Both groups acknowledged that participation in communities of practice, one of the main drivers of a learning system, requires time.

French-speaking participants suggested relying on administrative staff and/or the local health system level to help the neighbourhood level with continued learning and improvements.

During the Dutch-speaking discussions, participants proposed making it possible for care providers to **free up 20% of dedicated buffer time** ('protected time') for tasks outside of their direct care duties, such as interacting with learning networks. Although this seems unrealistic given the current capacity bottlenecks in healthcare, this could have several positive effects on the workforce. Indeed, buffer time will also render the profession much more attractive, and reduce drop-out rates. The possibility to zoom out and take a step away from one’s daily hectic schedule to exchange with peers in learning networks, to determine one's position in relation to other practices, to engage in 'root cause' analysis of recurring needs, has a highly motivating effect. Providers will be less inclined to change jobs or relocate. Other elements are likely to support the implementation of this buffer time. The shift to (partial) per capita funding should free up time by way of better work distribution. The use of task differentiation is another possibility proposed by stakeholders. The Royal Decree regulating the care professions must be revised. Following the Netherlands example, care professions must be more flexible, with a much smaller number of reserved procedures that can then preferably also be interpreted flexibly. Focusing on the “core business” (within a general culture of care subsidiarity at all levels) will free up a lot of capacity.

Dutch-speaking participants also insisted that patient representatives should not also be part of the equation, as they must be able to participate and be supported in these learning networks (compensation, time, support in terms of content, adapted learning agenda).

What are the prerequisites?

Regarding data management, the development of one single platform such as BIHR (Belgian Integrated Health Record - name proposed by one of the Dutch-speaking participants) for individual care and population management is seen as a priority, and e-Health programs should focus on integrated projects and not reinforce fragmentation. This will require a particular emphasis on privacy, and strict compliance with GPDR legislation. That was especially emphasised by the Dutch-speaking group.

Table 63 – Summary of the learning system section

General acceptance of stakeholders on	What remains to be defined
Having the time to enter into a continuous learning dynamic (among other things, to exchange within learning communities)	How can this allocated time be valued, financed and recognised?
The need to build on past experiences and lessons learned to continue their development based on "try and make mistakes", and to facilitate scaling up through learning and exchange of good practices	What framework will the authorities develop based on past experiences, and within which they accept and enable flexibility and autonomy for stakeholders?
The key components of an effective learning system: the development of a quality culture, the existence of reliable data, the support needed to learn and make improvements	Given that there are differences between regions, particularly in terms of (quality) culture, transparency (of results) and skills development, how will the learning system be implemented?

Financing

What are the paradigm shifts needed to support the transition to integrated care?

World Café participants stated that the transition to integrated local health systems is leading to a whole shift in how funding should be organised.

First, this transition must **strengthen and put primary care at the heart of local health systems**. Indeed, care should be organised close to the people, which means shifting the focus from hospital care teams to multidisciplinary primary care teams. For World Café participants, this transition will only be possible if primary care is structured through networks in territories and becomes a strong structure capable of negotiating (resources allocation) with other networks. For Dutch-speaking participants, this requires, among other things, a rethinking of the allocation of resources between care lines (and more specifically between primary care and secondary care). Subsequently, a better distribution of resources will be necessary between primary care and hospitals. However, what needs to be defined is whether the primary care should have more of a gate-keeping role and how to collaborate with specialist care such as gynaecologists, paediatricians.

Second, this transition must ensure that a **group of actors feels accountable for a clearly defined target population** and are remunerated so as to guide and support people throughout their entire lives (e.g., by capitation).

Third, this transition is operationalised at the level of local health systems which develop a population approach to best respond to local needs. French-speaking participants highlighted that the implementation of the funding reform must therefore be **differentiated according to local needs**. It should be possible to differentiate funding, or at least funding arrangements, according to the specificities of the areas concerned. This could relate both to methods of meeting the particular needs of users—such as financing a team (including different professionals) that is larger than elsewhere in disadvantaged areas—and ensuring the attractiveness of the more "challenging" areas. Obviously, care must be taken to ensure fairness between areas, to avoid negative competition. Consultation between the different zones, at the level of a territory, should be established. The localised identification of needs and the differentiation of these needs between territories should be the result of consultations between local system governance structures.

At what level is financing planned and why?

The proposed actions put forward by the participants highlight that financing is considered at the local health system level because at this level it is possible to take into account the combination of two approaches: organising primary care through a territorial approach (a population living in a catchment area) and organising the patient's optimal pathway between different professionals and/or care locations.

Why should funding reform be incremental?

The actions proposed underline the fact that funding is not an end in itself, but a tool to support an objective—in this case, integration of care. It is therefore suggested that funding reform be based on the concrete reality of work on the ground, and particularly on the problems encountered in re-organising care processes. Any reform must be able to resolve these problems, at least partially.

To make this possible, participants suggested initiating the funding reform with an initial investment to support it, as with all funding reforms. In the case of transition to integrated care, this initial investment should strengthen primary care and interprofessional collaboration. It must also enable the establishment of a local governance structure. Participants also spoke about financing network coordination (back office). These two elements are key to gradually building trust between actors, which was mentioned as essential by the French-speaking participants. This investment must be substantial. One of the participants mentioned the reflections on the subject within the German-speaking community which considers involving 7 FTEs for governance, management and integration of the local system, for the territory covered by the German-speaking community. Such a reform is therefore primarily aimed at improving quality and not necessarily saving money. Indeed, the realisation of potential savings will take much longer than one legislative cycle.

Once trust has been established between the actors, new funding arrangements can gradually be tested.

Finally, the sustainability of patient organisations was highlighted by French-speaking participants as necessary in a person-centred approach. It must therefore be included in all considerations on payment methods.

How to finance governance?

As explained in the previous paragraph, both World Café groups stressed the importance of funding governance and implementing this funding incrementally.

First of all, it is necessary to think of **core funding for governance** to organise and support collaboration/consultation between different actors. The French-speaking participants insisted that the experience of the integrated care pilot project has demonstrated the importance of this aspect, and the risks associated with initial under-investment.[33] Common governance (change management, funding, evaluation, improvement, skills management, etc.), which is pre-financed, is also a way of creating links between the partners. In the long term, by becoming "shareholders" in a common structure, they necessarily feel more vested and responsible for the operation and results produced. The effect of scale should also make it possible to limit the workload on the partners, particularly via exchanges and resource sharing.

The last step after the reform of provider funding will be to think of financing modalities that allow territories to manage their funding with relative autonomy. Indeed, modalities of "**shared savings**" could be implemented when conditions of trust, a reliable calculation of saving, and competence are met at the governance level. The modalities were discussed in both World Café groups during which participants brought up that these modalities should make it possible to launch a virtuous circle of governance operation. At this point, the "shared savings" should support a collaborative dynamic at the local health system level. To this end, it was proposed to transfer the management of potential benefits (reduced expenditures) into shared savings (possibly with a focus on "quick wins"), and then gradually include the risk of potential deficits (increased expenditures) as providers gain experience (and increase the share of money returned to providers in case of benefits). This is considered to be the last step as it requires managing populational data, doing proper risk adjustment and working with a long-term perspective.

How to finance care providers?

As for governance funding and as explained above, provider funding reform is also incremental.

First of all, participants suggested financing collaboration between professionals. This should encourage collaboration and, at the same time, develop trust between the stakeholders. This funding should also strengthen multidisciplinary consultation and agreement on care plans, among other things. To illustrate this, Dutch-speaking participants referred to the reallocation of resources within a professional group to encourage cooperation (e.g., the family/house pharmacist ("huisapotheker")). One possibility is to allocate funding (or not) on the basis of collaboration work, by granting, for example, a supplement in the case of proven collaboration. Similarly, funding coordinators or facilitators of collaboration and consultation can be an important lever for collaboration, by relieving professionals of a range of time-consuming administrative and logistical tasks. Financing collaboration between providers is essential to gradually build trust within the network. Trust and the territorial structuring of the primary care network are essential prerequisites for the gradual establishment of a mixed financing model.

Thereafter, a mixed model of funding can be gradually introduced.

With regard to the financing of primary care (the method of payment), there is a move towards payment mainly **by capita**. The following points of attention were mentioned by participants: (a) the possibility of payments based on patient risk level (through an initial screening), which should include prevention and curative services in the calculation of the per capita; (b) setting up safeguards to avoid the risk of some patients being excluded (patient selection); (c) providing the same financing method for all health care providers, possibly by implementation in phases (e.g., starting with general practitioners). The implementation of hybrid financing has been widely debated and recommended, combining per capita payment, fee-for-service payment, lump-sum payments or performance/quality payments (even if the latter does not seem to be very effective, has little support, and is even opposed to by the French-speaking participants). The combination of different types of financing should reflect the integrated approach between different functions of primary care. A proposition was made in the Dutch-speaking group to start with 70% risk-adjusted capitation and 30% other financing model.

Once primary care is strengthened, it is possible to start thinking about more bundled payments by developing different care pathways (e.g., between primary care and hospitals) to stimulate collaboration and integration. Participants in both groups agreed that bundled payments are appropriate for situations/pathologies with low variability (i.e., a more predictable pattern). Participants suggested learning from previous experiences and applying them to other situations (e.g., revalidation agreement, multiple sclerosis agreement, etc.). French-speaking participants were more reserved about bundled payments. On the other hand, some Dutch-speaking participants insisted on the implementation of bundled payment tests concurrently with work done to strengthen primary care. For example, they proposed to test bundled payment for long Covid patients.

Finally, the implementation of payment bundles is also designed to be gradual. Participants proposed starting with the justification for its use, followed by a phase of virtual payments, before finally putting the new mechanism in place. Virtual payments should help define the best combination of services/population to be included in the new payment method. Once this combination is defined, the management of these services can be transferred to the new system. However, in terms of using virtual payments, this approach was not shared by all participants. Some stakeholders expressed their concern regarding investing real money (e.g., buying software) to get virtual payments in place.

Table 64 – Summary of financing and funding

General acceptance of stakeholders on	What remains to be defined
The need for an incremental financing reform	How to manage the resistance generated by the various paradigm shifts necessary for the implementation of this reform? Some possibilities included working with virtual payments, simulations, and building trust. What is the phasing timeline for this reform?
The need for a substantial initial investment to strengthen inter-professional collaboration, establish the governance structure at the local health system level and thus build trust between actors	What does this initial investment represent in terms of financial and human resources? What are the framework and the prerequisites necessary to get this funding underway? For example, participants repeatedly mentioned the need to define coherent territories. However, what must be defined is whether the primary care needs to have a more gate-keeping role, and how to collaborate with specialist care such as gynaecologists, paediatricians
The need to adapt provider funding and develop a mixed model of funding, so that a group of actors feels accountable for a clearly defined population, and are remunerated in such a way as to guide and support people throughout their entire lives.	What exactly is the ideal mix of funding types? For which providers? Which kind of data is needed to be able to calculate risks?
Increase the per capita payment for primary care, while for some care pathways, bundled payment are preferred.	How can these two elements be adapted to the realities of each local health system?

6.4 Discussion

The final stage of this study was to identify, with a panel of experts, the actions that need to be implemented to advance the integration of care in Belgium, based on all the work carried out since the beginning of the study. The results presented above show stakeholder-driven solutions to build, strengthen or support the integration of our healthcare system. While there were differences between the French and Dutch speaking groups, these were limited and the experts essentially highlighted the issues that need to be addressed and the things that need to be strengthened in order to implement the next steps in integration within the Belgian context. These are therefore useful elements for policy-makers within the perspective to strengthen a health policy based on, and aiming at, integration of the health system.

Nevertheless, we should bear in mind that the results generated in this last part of the study and the study as a whole, are impacted by certain constraints.

The first constraint concerns the study's very tight schedule. The different data collections followed one another at a very fast pace, making it impossible to dedicate significant and sufficient time to processing and analysing the results, and reflecting on how to use them in the next step. This meant that the call for experts was done in a very short amount of time, which impacted the composition of the groups due to the limited availability of the experts solicited.

The second constraint, even more important than the first, concerns the profile of the selected experts. Indeed, we decided not to solicit representatives of stakeholders (medical unions, hospital federations, etc.) for this final stage as the list of proposed actions was long and therefore actions were not yet tangible. The objective was to avoid corporatist attitudes and to approach things with a mainly scientific vision. This led us to the observation, during the recruitment phase of the World Café participants, that there is a very limited number of academic experts on subjects of integration of health systems. This observation was even more noticeable with the French-speaking group. Moreover, not all the experts who gave written input on the 'transition pathway' could be present at the World Café discussions. Of course, each person who participated in the World Café had experience and/or expertise in certain aspects of integrated care, which enabled us to produce the results listed in the previous sections. However, the focus of formulating actions (especially during the World Café sessions) was more on organisational aspects and the medical sector (GPs, hospitals), and not so much on addressing all aspects, sub-sectors of health and social care (e.g., mental health care, rehabilitation sector, etc.). No other expert characteristics were collected, which could hamper the interpretation of the input they gave. However, as mentioned in the Methods section, experts were chosen based on their knowledge of organisational aspects of care and their ability to think from a meta-perspective rather than purely from the vantage point of defending interests.

The limited number of participants with "transversal" expertise on integrated care, coupled with the absence of stakeholder representatives, has obviously had an impact which is reflected, in particular, in the absence of a real contradictory debate on certain elements, which would have made it possible to identify the key points and the most important points of divergence to take into account for the next stages of integration. Additionally, the topic and idea discussed in the first group were further developed. Indeed, it is possible that if other people had started discussing the same topic, different proposals might have been made. Also, not all participants were equally active during the workshop or had expertise on all the discussed topics. An additional round in which participants could give further remarks on the written summary of the World Cafés might have provided more comprehensive input. When interpreting the results, these constraints have to be kept in mind, and it has to be stressed that no consensus was reached among the stakeholders of the Belgian health system, which would otherwise imply that the sector as a whole adheres to what is presented above.

Numerous interactions with stakeholders have shown that there is a lot of goodwill in the field, but also a lot of impatience: "*We have been devoting time and energy to this transition for almost four decades. It's time for action now*." Considering the suggestions that have been put forward by stakeholders, in the framework of the discussion groups (Chapter 4) as well as in "World Cafés" (Chapter 6), there appears to be an agreement about the key elements that have to be in place in order to put the transition to integrated care into a higher gear. Differences in opinion continue to exist about the precise way in which some of these elements need to be put into practice but the overall vision is clear to reach the Quintuple aim. The same key message on the vision was formulated following the analysis of the different policy documents from the federated and federal entities (Chapter 2). Indeed, this analysis revealed a consistent but fragmented message in a large number of policy documents, with some differences in terms of implementation and speed of implementation (between regions in particular).

The foundational recommendation to policy-makers that emerges from this study is the following: **create the conditions to allow actors in the field to move forward in the transition toward integrated care.**

In other words, the Federal Government, in sync with the federated entities, needs to provide a framework for providers and patients to drive the transition from the bottom up. This requires, on the one hand, decisive guidance in setting up vital infrastructures for integration. Additionally, it requires that space be vacated for self-organisation, local problem-solving and optimal allocation of resources in relation to local needs.

Stakeholders considered the following elements to foster the transition toward integrated care:

- more equity by way of improved health literacy and empowering people;
- effective and efficient primary care networks at the neighbourhood scale, supported by an adequate coordination function;
- effective and efficient local health systems built around longitudinal care paths, supported by an adequate coordination function at the governance level and with a strong voice in decision-making for primary care (meso-level);
- clear population-oriented goals and responsibilities for providers (including equitable access to value-based health care);
- predominance in capitation payment, integrated health promotion, prevention, and curative services by multidisciplinary primary care;

- bundled payment for specific care pathways to strengthen seamless care and to support multidisciplinary primary care functions;
- access to relevant patient and population data as a tool to learn from the local health system and adapt accordingly;
- availability of a physical and virtual knowledge infrastructure that allows for rapid diffusion of best practices and peer learning.

Together, these infrastructures form the functional components of a health care system that is responsive to evolving individual and local needs, efficiently allocates financial and human resources, redresses social inequities, and feeds the motivation of care providers. In other words, stakeholders see these as essential components of a health care system that is truly able to realise the Quintuple Aim.

Establishing these fundamental pillars requires a series of paradigm shifts.

The first paradigm shift calls for developing a **value-based approach** to care. This value-based approach is not monolithic. It is about negotiating value with each individual and within each community. The value seen as central, by the different participants and throughout the different chapters of this study in the transition to integrated care, is to put a person's preferences, goals and values at the centre of the care process. This approach may appear to be oriented towards an individual process (patient self-management, goal-oriented care, etc.), but in fact, it goes much further than that. It is about governments, all the different organisations and professionals creating the conditions and investing, to make person centredness really possible. It is therefore important to broaden this concept and to speak of a person-centred and community-centred approach. In a territorial approach, it will then be possible to define with the people and their communities, the health values they wish to carry and develop. This notion of value-based health care may easily be tied to notions of health democracy. It should be negotiated when interacting with the patient or the community, within multidisciplinary primary care teams and within the local health system governance structures, including all local health system stakeholders (patients, family carers, and citizens). Alongside this individual and community negotiation, there is a need for a central function to ensure equity and the negotiation of values at societal and national scale.

The second paradigm shift requires, **putting primary care at the heart of the system**. Today, the Belgian health system is still strongly built around the hospital system. A transition to integrated care requires reversing this, and strengthening and structuring primary care so that it can play a central role in the development of a territorial approach. Ambition and political choices will once again determine the extent to which we can move the transition forward. Participants highlighted the importance of structuring primary care through multidisciplinary teams/networks. Indeed, in addition to a territorial approach, the question of having a primary care multidisciplinary team responsible for the integration of health promotion, the prevention of ill-health, and the provision of curative services, implies that people register with this team from at the neighbourhood level. This requires a profound paradigm shift by encouraging/constraining multidisciplinary teamwork among primary care actors (instead of solo work which is still predominant today). In order to get closer to the patient/citizen, health care will have to be decompartmentalised. And for this to be possible, depillarisation is a necessary condition for a more intimate relationship between providers and patients.

Furthermore, strengthening and developing primary care closer to the communities it serves also means **developing a governance structure** that can represent the multidisciplinary primary care teams and position them strongly within the governance. In this study, this governance structure would be responsible for the local health system and bring together different multidisciplinary primary care teams (i.e., different neighbourhoods). These governance structures should, in theory, be the origin of the development and negotiation of care pathways with hospitals, specialised structures, etc. Today, even if the system has begun its transition (by starting to set up care pathways for specific diseases and considering bundled payments that include the pre-hospital, in-hospital and post-hospital phases; see hospital reform), the *captain of the ship* does not seem to be the GP. Most decisions are steered by the hospital, where most of the administrative, financial and data management skills are located. However, it would be unrealistic to imagine the development of a care pathway, including primary care, without a strong structure capable of representing it adequately. Other examples illustrate the difficulty in changing the paradigm. The majority of integrated care projects (Integreo) have focused their actions on developing care trajectories, not on developing a territorial approach (by strengthening primary care). Indeed, the approach developed by the pilot projects is incremental. This means that they start on familiar ground, for example by developing actions for a particular target patient population, a particular pathology, and/or with actors they already know well. Even if the starting point is generally an individual logic (focused on a specific situation), the set of actions developed to improve the management of this individual situation can help us better understand the system in which the action is implemented. A reflection on the place of primary care could then emerge from this process. Some projects (such as BOOST, with its neighbourhood specialists, or ZorgZaam Leuven) have focused their actions on strengthening primary care/neighbourhood approach. As such, they are inspiring initiatives.

These governance structures, at the local health system level, lead to another paradigm shift in the **way stakeholders are represented**. Today, stakeholders are represented by profession or by sector, which in many instances crystallises debates around the demands of each profession and sector. Within the local governance structures, representation by networks is now being favoured. In concrete terms, this means that each front-line multidisciplinary network/team would be represented within the governance structure in the same way as the mental health network or the hospital network are. It is not a question of completely eliminating a representation by sector or by profession; this is still necessary in certain situations. Rather, it is a question of thinking in terms of a representation which favours constructive debates and allows the realities from different contexts to be brought to the fore. The way stakeholders are represented was also in question at the macro level during our discussions. The central question was how to deal with corporatism. Behind this question, participants pointed to the need to move towards a different consultation model, where the one who shouts the loudest doesn’t necessarily win. They also stressed the need to question the way in which we make decisions and consider an approach that doesn’t always seek to reach a consensus.

These paradigm shifts must be accompanied by another profound paradigm shift that involves not only moving away from a fee-for-service model but also encouraging teamwork and multidisciplinary work. This should lead to a reform of payment systems that must ensure that a **group of actors feels accountable for a clearly defined target population and is remunerated so as to support people throughout their entire lives**. To achieve this, an incremental reform is proposed (based on the literature review (Chapter 5) and the recommendations made during the World Cafés). It begins with substantial initial funding to facilitate interprofessional collaboration (particularly at the primary care level) and to support governance at the local health system level. Then, it will be a matter of setting up provider funding arrangements that allow for the development of a territorial approach and a care trajectory approach.

These paradigm shifts require decisions to be taken together on the basis of tangible elements. A paradigm shift is also needed here. We need to move away from a culture of using data to control things, towards a **culture of using data to facilitate teamwork** (through the exchange of individual data when accompanying a patient) **and to feed the decision-making process** (by mobilising population data within local governance structures). The challenge is great from a technical and legal standpoint (interoperability, setting up dashboards within local health systems), but also in terms of capacity building and training: training in encoding using standardised terminology to generate population data based on individual files, but mostly training in the analysis and use of population data in a system-based logic, etc. There is also a request for a thorough review of the e-Health plan in light of integrated care. The projects that encourage fragmentation rather than integration must be adjusted. There is also an increasing demand for a single integrated patient record instead of continuing to invest in ways to connect different systems.

The last (but underpinning) paradigm shift is to establish an **adaptive learning culture** that encourages the practice of self-assessment, promotes innovation, experimentation and change, supports deliberate risk-taking, recognises the importance of learning from mistakes, and that encourages the creation of learning organisations. Today, new initiatives are still too often evaluated via methods that do not match their stage of development (e.g., cost-effectiveness evaluation while the initiative is still in its developmental stage). New initiatives need time and space to develop. Participants commented on this with regards to the primary care zones, the integrated care projects, etc. This adaptive learning culture must therefore be developed at all levels of the health system (within the multidisciplinary primary care teams, within the governance structures of the local health systems, within the regional domes, and at the federal level). These different layers of the learning system must feed off of each other. Evaluations are still necessary, but they should be conducted with the aim to support change, not necessarily to test the effectiveness or otherwise of the initiative. This new paradigm means that the evaluation process becomes a real driver for change. Beyond evaluations themselves, developing an evaluation culture also requires setting up virtual and physical spaces to exchange good and bad practices and learn from peers.

Finally, as concerning as it may seem, transitioning to integrated care was never called into question in the light of other societal transitions underway or soon to come (ecological transition, social transition, etc.). The definition of health advocated in the context of the transition to integrated care, goes far beyond the framework of "curative health". It includes all of the social determinants of health and considers not only individual health but also the health of a community living in a defined territory. By putting primary health care at the heart of the system, this transition also sets the benchmarks for a sustainable, local, and less technical health system. This societal debate on public health and ecological issues must be conducted with the aim to make this transition as sustainable as possible within the general framework of the transition of our society as a whole.

7 INTEGRATED CARE: TIME TO MOVE FORWARD

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Already more than 10 years several policy initiatives are taken to improve integrated care provision in Belgium.[27, 29, 32, 33, 61, 78, 310] The current Federal minister of Public Health commissioned the KCE to evaluate the stakeholders' view on the maturity of integrated care in Belgium, and stakeholders' views regarding the next steps in developing and implementing integrated care. Consequently, many of the highlights in this research are on actions dedicated to the policy level.

While a broad definition of integrated care was the starting point for this study, with the aim of consulting the broadest possible field (e.g. social sector, mental health care, rehabilitation, informal care, health care professionals, organisations, researchers, pilot project coordinators, patient organisations, etc.), it should be noted that along the way (when wanting to deepen some aspects), the focus shifted more towards healthcare, more specifically on primary care organisation and e.g. the interaction with hospitals, with the result that not all subsectors may have been fully included in the entire study. The broadest group of professionals was reached in the maturity assessment, which was a convenience sample, followed by the discussion groups, which was a subsample of the maturity assessment sample, while for the expert consultation, a smaller group of experts were invited, mostly researchers, chosen based on their knowledge on organisational aspects of care and ability to think from a meta-perspective rather than purely from the defence of interests. In this study, a few individuals were involved in all the different steps of the research, although this was really a very small number (mainly people from the policy level and pilot projects). In addition, due to the time constrains, it was not possible to discuss the action points into detail during the stakeholder consultations, and to submit the list with proposed actions in an iterative way to reach consensus among stakeholders about the actions that must be implemented to support integration of care in Belgium. Therefore, these views cannot be considered as representative of all surveyed stakeholders.

Professionals' perception of integrated care maturity in Belgium and the patient experience was assessed by using online surveys (see chapter 3) yielding in data from 865 professionals and 1298 patients. The results showed that the level of integration was scored low by the professionals in all regions. An analysis of the 20 questions of the PACIC instrument showed that patients reported a rather poor alignment of their care with the Chronic care model (in particular on items asking about the patient's ideas, expectations of treatment plan, on goals, on items regarding follow-up). However, as real questions on collaboration between professionals, sectors and continuity of care were lacking, it is not possible to draw firm conclusions regarding the experience of integrated care. Inference of the results must be done with caution because of the non-representativeness of the professional and patient sample due to the limitations in the recruitment method (e.g. convenience sample of professionals, patients were recruited only through patient organisations, sickness funds or social media) and data collection tools (e.g. PACIC is used as a proxy of integrated care experienced by the patients). Despite these limitations, the study clearly shows that the maturity of integrated care is still in its infancy. The obtained scores were coherently low across integrated care dimensions and respondent profiles. More importantly, there seems to be a gap between the breadth of ambition expressed in the policy documents (see Chapter 2) and the perception on the field.

In addition, via discussion groups (140 participants) and expert consultations (World cafés including 82 participants) **stakeholder driven action points for further development and implementation of integrated care** were gathered, resulting in many ideas and opinions (see chapters 4 and 6). While these consultations showed that there was quite a lot of convergence on the need for integrated care as well as on some general principles (e.g. person centred approach, as well as a population approach, territorial approach, access to data, more value based financing), it was difficult to conclude in these stakeholder consultations on tangible actions points. This might not come as a surprise since integrated care covers a wide range of sectors, professional groups, policy levels and patient groups. Also, the organisational, legal and financial frameworks of integrated care are still in the early stages of development and therefore hamper formulating very concrete actions. As a consequence, and in combination with the tight timeframe of the study, the output of the consultation process had to be limited to proposals for elements of the global framework for integrated care, and some general action points. In the next sections we describe the main messages that were derived from the stakeholders' consultation and the **literature review** carried out on financing mechanisms that support the development of integrated care (see chapter 5).

7.1 From scattered initiatives to a phased implementation of integrated care

The policy document analysis showed a large agreement among policy makers on the general objectives of integrated care such as promoting person-centered care, supporting the continuity of care, enhancing collaboration between professionals and sectors, and strengthening primary care, etc. Due to the broad scope of integrated care and the different authorities involved, several (not necessarily coordinated) initiatives were launched (see Chapter 2). Therefore, often the same professionals are solicitated to participate to those new initiatives / reforms / pilot projects leading to tensions, discouragement and a feeling of inconsistency. Moreover, stakeholders expressed that a 'Plan-Do-Check-Act' cycle is missing in those initiatives and not enough attention is paid to the evaluation, impeding a learning approach based on those initiatives. [31, 34, 126, 189, 311] It is important to note that evaluations of complex interventions are unlikely to produce simple yes/no answers that policy makers might desire[117], and information on the process/implementation should not be undervalued compared to outcomes.[117, 312] Knowledge and experience are available, though scattered over numerous initiatives/stakeholders. To that end, for the future, a phased approach with the possibility to draw lessons from previous evaluations has been put forward as the way to go. In addition, in this study, many ideas have been suggested by the stakeholders to further develop integrated care. The large number of suggestions to move integrated care forward demonstrates the need for a phased approach including a clear preparation phase in which the framework for the transition to integrated care and the priorities are defined. This preparatory phase should be used to identify and built upon successful and scalable initiatives, and to further develop elements mentioned by the stakeholders and expert groups (see below).

7.2 Transition to integrated care: main highlights that emerged from the stakeholder consultation

Of all the ideas and propositions gathered in this research, some merit to be highlighted which can help in further developing the transition towards integrated care.

7.2.1 *Structuring the integrated care provision*

7.2.1.1 *Policy framework*

Integrated care is an umbrella term, with several definitions and related concepts.[313] It touches upon many different sectors (primary care, hospital care, rehabilitation, palliative care, pharmaceutical care, social care, etc.) with often their own policy plans and reforms (e.g. the reform of the hospital landscape and financing in 2015, see chapter 2). Moreover, the Belgian context is particularly complex. Indeed, the Sixth State reform in 2014 resulted in further devolution as more competences were transferred to the federated entities but not always resulting in coherent division of power. As a consequence, federal and federated authorities face organisational challenges and might have different priorities. The broadness of integrated care concept and the complexity of the Belgian context are also reflected in the actions proposed by the stakeholders to have a better alignment between the different policy levels. Switzerland also faced the same challenge by navigating between centralised support for integrated care and scattered local integrated care initiatives.[113] However, we can find foreign experiences on how to deal with multidisciplinary in primary care in a context of co-existence of centralised and decentralised health authorities. In Canada, the interdisciplinary primary care teams are organised by a top-down framework with flexibility in implementation.[314] While the Canadian Federal Government provided financial support to Provinces and Territories to redesign the delivery of primary care, the interdisciplinary primary care teams were differently designed and implemented across regions.

Despite the existence (since 2015) of a joint vision and plan of the federal and federated entities on integrated care for chronic conditions which also includes the principles of the "*quintuple aim*" and 18 components of integrated care, stakeholders expressed a strong desire to know what will be implemented/changed, the associated timeline, who is responsible and what the priorities are. Moreover, they felt such a Joint Plan should be the result of a real shared commitment of all policy makers both in federal and federated authorities.

In the declaration of the Federal Government in September 2020, the intention to develop an inter-federal plan has been expressed. As a consequence, the joint working group on integrated care (*IKW Geintegreerde zorg – GTI soins intégrés*), where all cabinets and administrations are present, has been re-activated to prepare this inter-federal plan. Very recently (June 2022), the federal level launched the preparatory phase of this inter-federal plan with the guidance of a consultancy consortium. To have a plan ready by the end of 2023, which then can result in a formal cooperation agreement ("samenwerkingsakkoord" - "accord de coopération").

Some stakeholders pointed out that this is an ideal opportunity to renew commitment, set the priorities to avoid scattered initiatives and coordinate integrated care policies on a structural basis.

7.2.1.2 *Territorial approach*

Territorial approach to better match the care supply with population needs

Consulted stakeholders agreed upon a territorial approach as the way forward towards further development of integrated care in Belgium. Foremost, because it will help to clarify who are the partners to collaborate with, and for which population the care needs to be organised (population management). Nevertheless, the current geographical zones are not established yet for the entire territory (e.g. primary care zones set-up only in Flanders) nor attuned to each other (e.g. primary care zones vs. hospital networks vs. mental health care networks). More importantly there is no clear guidance on how they should collaborate/interact with each other.

The size of the territories: different options to be considered

While structuring primary care providers into a territory has been voiced as a condition to strengthen primary care, questions that need to be addressed by policymakers are: how the territorial approaches used in primary, secondary, mental and social care need to be aligned? What is the optimal size of a territory? And what is their assignment? Should there be a governance structure set up? No clear-cut answers emerge from the current research. Nevertheless, several options were voiced, all with advantages and disadvantages. For example, several options about the size of a territorial area were discussed, all depending on which tasks the geographical demarcation should fulfil: the neighbourhood approach in the “living areas” (“bassin de vie”, "leefomgeving" - population of 5000 to 10 000), the current primary care zone logic as implemented in Flanders (population of 70 000 to 150 000) or larger zones such as the territories covered by hospital networks or integrated care pilot projects (population of 75 000 to 300 000).

Encouraging a neighbourhood approach, which focuses on primary care professionals that work in a non-disease specific multidisciplinary team or network has been proposed. A small size of the care territory makes it easier to build relationships between network members, to be anchored in a more local context, and be approachable to the patient. However, when you want to build a population approach (organising supply and attributing financing based on the population living in that area) this smaller neighbourhood approach is prone to not having all the necessary professionals in this area to be able to provide care from prevention to palliative care or can be an obstacle for the patient’s freedom of care providers choice. In addition, small size territories do not allow to gather in each territory people with specific skills such as data management, population management, financial aspect, animation of community of practice, etc.

The territorial approach on a larger scale (loco-regional – local health system) grouping a sufficient number of care providers and (hospital) organisations was more often discussed among stakeholders. The size should be small enough to take into account differences in contexts, to have/maintain connection with the professionals and population (build trust), but at the same time large enough to foresee in care provision from prevention to palliative care. It seemed that this larger scale is an appropriate level to organise intersectoral and interorganisational collaboration, next to interprofessional collaboration, to foresee interprofessional training, to establish population management (based on population data) and install (when deemed appropriate) a governance structure with ideally a team of people with multiple skills to lead the change process in a defined geographical area. Moreover, stakeholders pointed that if this level is targeted to attribute financial resources, the team should have the skills and capacity to manage financial resources. As new payment methods need to be implemented on a scale that is large enough to reduce the variability of costs leading to uncertainty in the ability to recover them, a larger geographical area makes it more realistic to have population data and makes it possible to foresee in risk adjustments when financial means are allocated (e.g. shared savings and risks in an accountable care organisations). It is important to build on the lessons learned from previous experiences. For example, the pilot projects on integrated care have experience with establishing such a governance structure on a meso-level, in coordinating different actions, managing data and monitoring quality. These governance structures received a budget to organise the back-office, and stakeholders emphasised this indeed must be remunerated.[189]

Larger territories enable the alignment with the territories of secondary care but might limit the quality of the interactions between members of these kind of network.

Finally, stakeholders also highlighted that too many governance layers should be avoided. They advised to keep the governance structure at meso-level as simple as possible. The role of the meso-level is mainly focused on the populational approach (overlooking the care supply with sufficient competent professionals, managing care agreements, etc), and is there to support the person-centered approach. The meso-level has therefore an indirect impact on the interactions with the patient or on the interactions between professionals. In contrast, person-centered approach puts the person’s goals and experience of care central. This approach requires more human resources including trained professionals (see below) supported by shared digital tools and having sufficient time to appropriate and implement the person-centered approach.

7.2.2 *From disease management to population approach in a territory*

Integration of care requires the development of a population approach in combination with a person-centred approach and a care pathways approach to bridge primary and secondary care. Stakeholders identified elements needed to develop such an approach: a strong primary care sector able to accompany individuals throughout the life cycle, care pathways, a definition of care territories, inter-sectorial data exchange, the availability of tools (e.g. population dashboard, identification of risk within the population or relevant indicators for population managment), and a revised funding system (see section 7.2.4).

However, it was not possible to identify how far the stakeholders would like to go in the direction of population health management.[315] While stakeholders advocated for population dashboards, they did not detail how these dashboards should be used for segmentation, risk stratification and decision making of resource allocation. If population health management is an emergent form of service planification, attention must be paid that population health management does not collide with person centred care and remains supportive to person centred care provision.

7.2.3 Integration of care providers

Initiatives for targeted patient groups are important but insufficient

Overall, organisation of care providers is assessed as fragmented, working in silo, and not yet integrated between professions, care settings or sectors. There are already some initiatives that stimulate collaboration/integration such as the multidisciplinary team meetings in oncology or external geriatric liaison teams. However, these initiatives are limited in scope (e.g. often focused on specific patient groups). Focussing on a specific group of people/patients, can help in structuring collaboration, to specify each other's roles and functions, to define the gaps. It has been stressed by the stakeholders that it is important to know each other's roles and functions, to build trust. Yet, stakeholders also stated that there is a need to surpass these specific target groups and adopt this way of working in the long run as a default approach.

In this study, policy documents as well as stakeholders often mentioned to also create more collaboration between the health and social sector, e.g. to also consider the social actors as part of the multidisciplinary team with clear tasks/responsibilities, which could be facilitated by working with similar digital tools, having access to the relevant information, and being remunerated for the time of coordination around and with a patient.

In an attempt to breakdown the fragmentation between professions, settings or sectors, the NIHDI (RIZIV – INAMI) has also launched a reform in budget planning by centring budgetary decisions around health goals and move away from traditional budget planning segmented in sectors (hospital, primary care, mental health, etc.). In addition, there will be future care trajectories based on priorities (obesity, diabetes, long COVID, perinatal care, psychiatric care, etc).

Collaboration in the primary care

At the organisational level, stakeholders advocated for a structuration of primary care by defining territories and developing networks based on strong links between health and social care and between primary and secondary care. Mapping the available provider supply, having the opportunity to get to know each other, one's roles and functions, building trust between partners which can be encouraged by having repeated interactions, and easing data exchange are reported as key elements. In addition, stimulating the collaboration between professionals, stakeholders proposed to restructure basic training and continuous education of professionals in order to develop capacity and skills for integrated care (e.g. instilling a culture of evaluation and quality orientation, developing data and digital literacy, or deepening skills in multidisciplinary collaboration, population approach, change management, goal-oriented care, etc.)

Stakeholders reported that supporting the organisation and financing of multidisciplinary team meetings and coordination activities should facilitate inter-professional and inter-sectoral collaboration during the interaction with the patient.

7.2.4 Revised funding model for integrated care

Current financing system identified as one of the main barriers in achieving integrated care

According to the (inter-)national literature (see chapter 5 and Danhieux et al.[112]) and the stakeholder consultation in this study, the current volume-based financing system (fee-for-service) is perceived as one of the main barriers to obtain integrated care. Volume-based financing does not include sufficient incentives for collaboration and prevention, hampering the implementation of a multidisciplinary approach that starts from the population needs.

Towards a financing system with an increased mix of different financing mechanisms

Stakeholders agree that it is time to make the shift from a predominantly fee-for-service based funding system toward a value-based funding model including a larger proportion of other financing modalities such as bundle payment, pay-for-performance, etc. This is in line with the recent policy initiatives and reforms including other methods to finance health care. In particular, in the hospital financing reform the first steps towards bundle payments are made in the hope to strength seamless care process, discourage repeated tests and examinations and reduce overconsumption.

Fee-for-service still has a place in the way healthcare providers are financed in Belgium. In that respect it has to be stressed that the comprehensive reform of the fee tariffs (nomenclature) is important.[193] Next to the objective to correct the large variation in income between general practitioners and specialist doctors or within specialists and to install a more transparent and standardised way of determining the fees, it is envisaged to have adapted modalities of financing multidisciplinary meetings, cooperation and integrated care. These reforms still include many unknowns and uncertainties. However, as they are still in a starting phase, it seems to be an ideal opportunity to elaborate and prepare new ways of financing to stimulate integration of care. Further reforms need to have clear objectives, be aligned with the ongoing reforms, include implementation details, and be well-planned with clear phases (incremental).

Despite the absence of consistent robust research findings, the literature suggests that there are several possibilities to encourage integrated care, collaboration and a person-centered approach.

- On the individual provider level: knowing that no single provider payment method is perfect or meets all needs, the literature suggests to move away from a single mode of payment and to develop a mixed provider payment system. What is the ideal mix and which providers fall under this, were not specified, though literature states that a country/region should define this based on its health care objectives and the human resources, and data systems available. Also taking into account that the ideal mix for a country, region or institution will change over time as providers adapt, and as health care objectives and challenges evolve. The reflection on blended payment systems is not new, as there have been some suggestions.[316, 317]
- On the meso level the literature suggests to progressively make local healthcare networks accountable for their population (population-based payments) by installing shared savings (such as in Accountable Care Organisations). In view of the integrated care pilot projects, there are continous efforts to design and optimise calculation models to be able to introduce the shared savings concept in Belgium.[318]

The roll-out of financing reforms has to be incrementally

From the literature review we also learned that there are pre-conditions that should be put in place before moving forward. Most of the experiences on adapting financing to promote integrated care, emphasize the need to rollout the reform incrementally:

- Payment reforms require a transformation at the macro level to have the more technical support structures in place such as data availability including interoperable information data systems, and the ability to do risk adjustments, legal infrastructure, personnel skilled in systems reform, sufficient financial support, etc.
- Such reforms also require developing a culture of change and trust, political commitment and a culture of continuous improvement.
- Suggestion to start with “virtual” target payments before shifting to real prospective payments to define the best mix of benefits package/population; then, transferring to shared upside risks only (with a possible focus on “quick wins”), and finally, progressively introducing downside risks as providers gain experience (with increased shared savings).
- Aside from the gradual transfer of risks to providers, payment mechanisms coming from different payers have to be aligned to reduce administrative burden and make participation more compelling to providers.

A first priority: financing primary care such that person-centred care is stimulated

While the literature presented in chapter 5 highlighted the extension of the scope of payment to the full cycle of care, most of the discussions among the stakeholders and experts were focussed on primary care (though no specific discussion on which care providers were targeted as primary care). Literature (see Chapter 5) as well as stakeholders suggest having a strong and broad base payment that allows for a person-based approach, especially in primary care (e.g. using payment per capita) complemented with value-based payment, based on agreed-upon metrics and some forms of payment for coordination (e.g. lump sum). Payment for coordination was highlighted by the stakeholders as a way to encourage collaboration and develop trust between actors. However, there is resistance to change in the medical community, which is a strong advocate of fee-for-service payment. The remuneration of interdisciplinary primary care teams in Canada can be informative. Wranik et al. (2017) defined a framework composed of two dimensions of the financial model.[314] The first dimension is funding (i.e. the financial compensation of the team as an entity), and the second dimension is remuneration (i.e. the financial compensation of individual providers within teams). The authors also highlighted the importance of taking into consideration the degree to which funding is isolated from remuneration and the degree to which the remuneration of providers within the team is dependent. The funding can be either lump sum or pegged to the activity of the team as a whole (e.g. number of services or patients) or pegged to the activities of a core provider (e.g. fee-for-service to medical doctor). The degree of dependence between provider incomes ranges from interdependence (incomes of providers are pooled and redistributed according to a predefined allocation key) to hierarchical dependence (incomes of some providers are pegged to the core provider's activities and not vice versa e.g. the fee-for-service revenue of medical doctors are used to paid nurses' salary), including the independence (all providers receive a fixed salary). The authors concluded that incentives are strongest when provider remuneration is interdependent and combined with a team funding model that is linked to whole team activities. In addition, they considered that non-financial incentives play an important role in motivating providers. However, hierarchy remained an issue where team funding is tied to physician activities. It is also stressed that a multiplicity of funding sources can result in multiple lines of accountability.

Changing financing is only a part of a broader transformation of the health care system and should not be a goal on itself.

Reforms require an initial investment to get started

Stakeholders pointed the need for an initial investment, because time and resources are required to map out the concept, to test, and to build trust between the stakeholders, to be able to finance interprofessional collaboration around a patient and having a back-office in place for population management and if financial arrangements are to be handled.

7.2.5 Supporting data for integration of care

Data availability, inter-operability of the ICT tools, and human resources with skills in data analysis are important prerequisites to start with territorial approach, population management, monitoring the quality, adapting the financing system to provide more value-based care, and stimulating efficient communication and data exchange with and around a patient. Stakeholders acknowledged that a lot of initiatives are already ongoing and technical and legal hurdles need to be tackled such as privacy, compliance to GDPR, etc. However, they have the feeling that these prerequisites take a long time to be implemented. Integration of care induces a shift in the purpose of data use: from exploiting them for control to using them as a facilitator of teamwork.

Data on care supply

Data on the available provider supply can help in searching and creating a multidisciplinary network around a patient, but also to identify gaps in the care landscape (professionals with certain expertise missing…) As one of the actions mentioned, stakeholders highlighted the need for a single point of access to identify the available provider supply in his/her territory to have it easy accessible (e.g. a website) for the provider as well as the patient (existing examples are the website www.desocialekaart.be in Flanders and online healthcare professional directory of NIHDI (RIZIV – INAMI)[319].

Individual data

As shown in the policy document analysis, the e-Health roadmap 3.0 approved by the inter-ministerial conference in 2019 included activities around multidisciplinary information exchange, multidisciplinary collaboration, generalisation of the electronic patient record at the hospital and its consultation in primary care, communication and planning of health and social care, patient summary for transborder use and patients' access to their data. The availability of an electronic patient record at the hospital and by the GP is a first step in the collaboration but it is not enough to create the real shared unique patient file with all relevant partners allowed to write / read in the file according to agreed upon access roles. The partners also include nurses, pharmacists, allied health professionals, social workers, health institutions.

From these activities, stakeholders pointed out the following elements as pre-requirement for the implementation of integrated care: a unique multidisciplinary electronic patient record and a secure platform for data exchange and communication.

Stakeholders also highlighted the patient empowerment in the data collection in their medical record (e.g. their personal goals, side effects encountered, etc.). Internationally this has also been highlighted as the Eurpean Commission launched in May 2022 the "*European Health Data Space for people and science*" aiming to empower people to control and utilise their health data in their home country or in other Member States and to develop a framework to use health data for research, innovation, policy-making and regulatory activities, while ensuring full compliance with the GDPR.[320]

Population data

Stakeholders called for population data to design the local supply of services and interventions using the population approach, to feed the territorial approach of the integrated care governance, to support decision-making (among others on funding), and to be able to monitor (having a dashboard available, be able to construct and measure quality indicators. A reflection is needed on which individual data (e.g. health related, socio-economic data) is relevant to access in the context of the population approach and to be able to establish a funding based on risk adjustment.

7.3 Impact of integrated care on Quintuple aim: what we learn from the literature

As previously mentioned, integrated care is characterised by a large variety of implementation methods showing the lack of agreement on the concept.[321] Therefore, integrated care is investigated and evaluated by several methods and measuring the effects of integrated care is thus not straightforward.[321, 322]

In 2018, Baxter et al. performed a systematic review on the effect of integration on effectiveness, efficiency and quality of care.[323] The authors showed that integrated care may have a positive impact on two dimensions of the quintuple aim (i.e 'improve patient experience and outcomes' and 'improve health and social services equity') because evidence showed enhancement of patient satisfaction, increased perceived quality of care, and better access to services. However, the evidence for service costs remained unclear. The authors stressed differences between the evidence from integrated care in the UK and outside of the UK leading us to conclude that local context plays an important role in the effect of integrated care.

A more recent review investigated the effect of integrated care on a range of outcomes, from patient experience to economic impact.[322] The authors highlighted the gap between expectations about the effects of integrated care and evidence of actual change. In this review, evidence also demonstrated positive effects on quality of care and found evidence of reduced health service use (hospital admissions), but only when the population at risk is well targeted. As mentioned by Baxter et al. (2018)[323], Hughe et al.(2020)[322] confirmed that there is little evidence that integrated care can reduce direct or indirect costs or improve cost-effectiveness. In addition, they showed that working in a multidisciplinary way did not alter professional satisfaction and even increased the workload due to time spent on non-patient related tasks (e.g. meetings, administrative tasks) in integrated care programmes implemented in the Netherlands. In addition, the authors concluded that working in a multidisciplinary way has changed the relationships between professionals, but not to the extent that it has led to changes for patients or the system as a whole. Multidisciplinary working has not changed professional roles and hierarchies. Traditional patterns of medical dominance in health and social care teams have persisted despite the development of participatory team dynamics.

Subject to several theoretical descriptions and conceptual frameworks, integrated care is a multi-faced approach notoriously difficult to design and whose impacts are difficult to predict. [321] Because integrated care can be seen as a suitable vehicle for change and clinical redesign[324], some authors qualified integration of care as a stony but necessary road.[325]

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