

SYNTHESIS

NINE DOMAINS OF INTERVENTION TO IMPROVE THE MULTIMODAL MANAGEMENT OF CHRONIC PAIN IN BELGIUM



PASCALE JONCKHEER, ANJA DESOMER, NADIA BENAHMED, BÉNÉDICTE VOS, DORINE LENOIR



■ FOREWORD

Chronic pain, defined as pain that persists for at least three months, is one of the most significant health problems our society has to face. Accurate prevalence figures are lacking but, based on estimates, up to one million people may be suffering from chronic pain in Belgium, resulting in a substantial impact on quality of life and participation in social and professional life.

Over the past few decades, chronic pain has been approached mainly from a biomedical perspective, with an emphasis on pathophysiology and on identifying physical causes. However, experience has taught us that this view is too simplistic and does not provide satisfactory answers to this complex problem. Scientific research too confirms the relevance of a broader approach, known as the biopsychosocial model. In this model, pain is defined as an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage. This experience is always personal and influenced to varying degrees by biological, psychological and social factors. The biopsychosocial model enables healthcare providers to offer persons with chronic pain support that covers all these dimensions and to suggest therapeutic approaches that go beyond purely biomedical interventions like medication, injections, physiotherapy, etc.

However, the practical implementation of this biopsychosocial model is far from straightforward. It implies using a variety of approaches, which also means that collaboration between various professionals – e.g. physicians, psychologists and physiotherapists – is paramount. Furthermore, patients are not always familiar with this model and may be reluctant to accept something new or different, and even healthcare providers are not always fully familiar with or convinced by the biopsychosocial approach. As a result, the biopsychosocial model still struggles to gain acceptance in the field. This study project has investigated the existing obstacles and proposes solutions to mitigate or remove them, with the ultimate goal of improving the quality of life of patients with chronic pain.

Christophe JANSSENS
Deputy general director

Ann VAN DEN BRUEL
General director



■ TABLE OF CONTENTS

1	INTRODUCTION	3
1.1	PAIN.....	3
1.1.1	A major issue with a substantial impact	3
1.1.2	A complex phenomenon.....	3
1.1.3	A diagnosis in its own right.....	4
1.2	THE BIOPSYCHOSOCIAL MODEL AND MULTIMODAL PAIN MANAGEMENT	4
1.2.1	The three components of pain.....	4
1.2.2	Multimodal pain management	5
1.2.3	The importance of Pain Neuroscience Education	5
2	OBJECTIVES AND METHODS	6
3	NINE DOMAINS OF INTERVENTION TO IMPROVE THE MULTIMODAL MANAGEMENT OF CHRONIC PAIN	7
3.1	INTEGRATED CARE AND INTERCONNECTION AT ALL LEVELS	7
3.2	ATTENTION POINTS FOR EACH OF THE NINE DOMAINS OF INTERVENTION	9
3.2.1	Improving patient empowerment by ensuring patient-centred care	9
3.2.2	Defining a care pathway	10
3.2.3	Strengthening interprofessional collaboration	13
3.2.4	Improving the training of healthcare professionals.....	13
3.2.5	Raising public awareness.....	14
3.2.6	Developing an appropriate funding model	15
3.2.7	Encouraging data collection and research	15
3.2.8	A multi-stakeholder working group	17
3.2.9	A National Action Plan on Pain	17
4	CONCLUSION.....	18

■ SYNTHESIS

1 INTRODUCTION

1.1 Pain

1.1.1 *A major issue with a substantial impact*

The global **prevalence** of chronic pain is high, at around 20 to 25%. There are no recent figures for Belgium but, in a broad European survey conducted in 2003, 23% of Belgian adults reported suffering from pain for more than six months. Just over a third described their pain as severe.

Like many other chronic health problems, pain disproportionately affects some **vulnerable populations**, particularly people who already struggle with other physical or mental health issues. It is also more frequent in specific **socio-demographic profiles**, particularly women, older adults and persons with little formal education. There is a very real possibility that the prevalence of pain will increase over time as the population ages.

Chronic pain has a **significant impact on many levels**.

Individual patients may experience impairments in their physical functioning, quality of life, sleep, mental health and social and professional life. As pain is invisible, persons living with chronic pain report feeling misunderstood or even stigmatised by their friends, families and colleagues, but also by healthcare professionals, and end up feeling isolated.

However, chronic pain also has a considerable impact on **society as a whole** through direct and indirect costs. The former are costs **directly** related to healthcare consumption (consultations, imaging, specialised treatments, etc.). In Belgium, a study conducted in 2018 in French-speaking general practices showed that patients suffering from chronic pain account for between 33% and 49% of consultations with general practitioners. In addition to these direct costs, there are also **indirect** costs related to productivity loss due to absence from work or lower at-work productivity (presenteeism), education loss for students, burden on informal carers, etc.

According to another study, musculoskeletal disorders (a common cause of chronic pain) affect no less than 2.5 million Belgians, resulting in yearly costs amounting to €3 billion in medical expenses and €2 billion in work absenteeism. However, this study did not mention whether these persons effectively experienced pain, or for how long.

1.1.2 *A complex phenomenon*

Pain is a complex phenomenon, and our understanding of it is constantly evolving. In its latest definition, revised in 2020, *The International Association for the Study of Pain* (IASP) describes pain as 'an **unpleasant sensory and emotional experience** associated with, or resembling that associated with, **actual or potential** tissue damage'.

Pain can be further specified based on various criteria. For instance, three stages are distinguished based on duration:

- **Acute pain** is defined as 'pain of recent onset and probable limited duration'. It falls outside the scope of this study.
- When pain persists for 3 to 12 weeks, it is referred to as **transitional** or **subacute**. This is an important concept, as effective pain management should begin at this stage to prevent chronicisation.

- Pain is considered **chronic** (or “persistent”) when it lasts for more than three months. Chronic pain does not have to be constant: it can also be “episodic” pain, which comes and goes more or less regularly.

Pain also falls into three main categories based on the underlying mechanism:

- **Nociceptive pain** involves stimulation of nerve fibres because of an injury or the threat of an injury, such as a burn or wound.
- **Neuropathic pain** occurs when the nervous system is damaged as a result of an accident or a disease like shingles or diabetic neuropathy.
- **Nociplastic pain** is a fairly recent concept (2016) that refers to situations where neither of the two previous mechanisms appear to be involved. This type of pain occurs when the nervous system does not process pain information correctly and a dysfunction causes it to become “hypersensitive”.

As these three types of pain are not mutually exclusive, patients sometimes experience a combination of several types, which makes the issue particularly complex. To fully acknowledge this complexity, the IASP has completed its definition of pain with six additional key notes. These emphasise that **pain is distinct from nociception**, and that it is a **personal experience** that is influenced to varying degrees by biological, psychological and social factors (see section 1.2.1). Furthermore, it is not an innate concept, but one that **is learned** through our experiences and life journey. As a result, the way someone reports this experience – through words, but also through **behaviours** – is always valid and must be **respected**. Finally, the IASP stresses that, while pain normally has an **adaptive role** (it helps us adjust to the world around us, e.g. by avoiding danger), it may also have **adverse effects** on our functioning and social and psychological well-being.

1.1.3 A diagnosis in its own right

Chronic pain is now considered a **diagnosis in its own right** by the IASP and the World Health Organisation (WHO). This recognition is important for patients and healthcare professionals, because chronic pain is now seen as a distinct health problem rather than a more or less subjective symptom of another condition.

1.2 The biopsychosocial model and multimodal pain management

1.2.1 The three components of pain

Pain (including chronic pain) has long been seen as a purely biological/physical phenomenon that could be remedied by medical intervention (e.g. treating an underlying disease). This notion still consciously or unconsciously influences many patients and healthcare professionals: when faced with persistent pain, we often start by looking for a specific cause or a simple solution such as medication or surgery.

However, as we have seen, pain is a complex phenomenon that does not always have an identifiable biomedical cause or simple solution. This is why **the biomedical view has been expanded to a biopsychosocial (BPS) model**, which emphasises that the human body is not a machine but the result of a combination of interconnected factors.

According to this model, pain is the result of three main components:

- The **biological** component includes factors such as genetics, inflammation, nociception, and dysfunctions or damage to the body and body tissues. This category includes biomedical contributors such as diseases and infections.



- The **psychological** component relates to how we view pain and pain management: our beliefs, opinions, knowledge, feelings, etc. It includes risk factors such as fears, depressive thoughts, previous trauma, expectations regarding treatment or the belief that the problem cannot improve
- The **social** component relates to the world around us: our loved ones, our community, our culture, our environment, our access to care, etc. Risk factors include isolation, financial difficulties, barriers to timely access to care, difficult living or working conditions, etc.

1.2.2 *Multimodal pain management*

The BPS model encourages us to explore different points of view not just to better understand pain in all its complexity, but also to manage it better. This involves what is known as multimodal care, i.e. **a personalised approach that combines several types of interventions** (e.g. physical exercise, peer discussions, psychological support). This multimodal management can be provided by an interdisciplinary team or by an individual provider: acting on several fronts does not automatically mean that several people need to be involved. However, what constitutes the most appropriate therapy must always be tailored to the individual needs and profile of the patient. The first step is to carefully assess the factors relating to each of the three components above in order to be able to offer the patient what they need.

There is no shortage of scientific evidence in favour of the multimodal management pain, but its implementation in practice has proven difficult and there remains considerable room for improvement, in Belgium as elsewhere.

It is also worth noting the BPS approach goes well beyond the scope of pain and can be applied to other health problems.

1.2.3 *The importance of Pain Neuroscience Education*

In the BPS model, patients are encouraged to **actively contribute to managing their pain**, which requires them to have a certain understanding of how pain works. This is why **Pain Neuroscience Education** (PNE) is an essential part of multimodal chronic pain management.

This ongoing process, based on the use of tools and metaphors, is aimed primarily at patients, but potentially also at healthcare providers.

The aim of PNE is both to unlearn harmful beliefs about pain and to acquire knowledge of neurobiology and neurophysiology. Understanding that pain can result from mechanisms other than nociception and be influenced by many factors can, for example, help patients have more realistic expectations and play a more active role in their rehabilitation journey. As explained in Table 1, the main principles to understand in PNE are that pain is a sign of danger, that it is not always associated with an injury and that, in some cases, the brain “overprotects” the body by increasing pain sensitivity (like a hypersensitive alarm system that reacts to a small cloud of dust in the air as if it were a fire). Conversely, our brain also has a very powerful pain attenuation system.



Table 1 – Understanding pain to manage it better

Target concept	Explanation
1. Pain is normal, personal and always real.	All pain experiences are normal and are an excellent, though unpleasant, response to what your brain judges to be a threatening situation. All pain is real.
2. There are danger sensors, not pain sensors.	The danger alarm system is just that – there are no pain sensors, pain pathways or pain endings.
3. Pain and tissue damage are rarely related.	Pain is an unreliable indicator of the presence or extent of tissue damage – either can exist without the other.
4. Pain depends on the balance of danger and safety.	You will have pain when your brain concludes that there is more credible evidence of danger than safety related to your body and thus infers the need to protect.
5. Pain involves distributed brain activity.	There is no single ‘pain centre’ in the brain. Pain is a conscious experience that necessarily involves many brain areas across time.
6. Pain relies on context.	Pain can be influenced by the things you see, hear, smell, taste and touch, things you say, things you think and believe, things you do, places you go, people in your life and things happening in your body.
7. Pain is one of many protective outputs.	When threatened, the body is capable of activating multiple protective systems including immune, endocrine, motor, autonomic, respiratory, cognitive, emotional and pain. Any or all of these systems can become overprotective.
8. We are bioplastic.	While all protective systems can become turned up and edgy, the notion of bioplasticity suggests that they can change back, through the lifespan. It is biologically implausible to suggest that pain can’t change.
9. Learning about pain can help the individual and society.	Learning about pain is therapy. When you understand why you hurt, you hurt less. If you have a pain problem, you are not alone – millions of others do too. But there are many researchers and clinicians working to find ways to help.
10. Active treatment strategies promote recovery.	Once you understand pain, you can begin to make plans, explore different ways to move, improve your fitness, eat better, sleep better, demolish DIMs*, find SIMs** and gradually do more.

*DIMs = *Danger in me such as looking at an x-ray, believing that pain is forever, a nosey neighbour...*

**SIMs = *Safety in me such as gentle exercise, believing in the health professionals, friends who understand...*

Source : Moseley GL, Butler SD. *Explain Pain Supercharged*. Noigroup Publications; 2017.

2 OBJECTIVES AND METHODS

The aim of this study is to propose **interventions to improve the multimodal management of chronic pain in adult patients in Belgium**.

To this end, several research questions were formulated to identify the **barriers and facilitators to the adoption of a multimodal approach** (including the BPS model and pain education) in **patients and healthcare professionals**, to identify the **barriers and facilitators to the establishment of local “pain” networks** applying this approach, and to identify **possible/feasible/acceptable interventions to improve the use of the multimodal approach** in Belgium.

To answer these questions, the research team drew on various data sources: scientific literature, grey literature, discussions with patients and professionals working in pain centres, and Belgian and foreign experts. Based on the results, it then defined **nine domains of intervention** including multiple **action points** each, which were assessed by a wide range of stakeholders and finalised taking their feedback into account.

3 NINE DOMAINS OF INTERVENTION TO IMPROVE THE MULTIMODAL MANAGEMENT OF CHRONIC PAIN

3.1 Integrated care and interconnection at all levels

Our analysis of literature sources and of the Belgian context show that there are so many interconnected barriers and facilitators to multimodal pain management that interventions must target multiple levels (see chapters 3 and 4 of the scientific report).

Many interventions proposed to improve multimodal pain management are similar to those recommended for developing integrated care. It could even be argued that its complex and multidimensional nature – encompassing biological, psychological and social dimensions – make chronic pain a particularly relevant case for initiating the transition from fragmented care provision to a more coherent and coordinated model of care. This integration can and must take place at several levels: in the relationship between patient and healthcare professional (micro level), in the organisation of care and interprofessional collaboration (meso level), and in what society puts in place in terms of funding, research, professional training, etc. (macro level).

Figure 1 – Overview of the various factors involved in pain

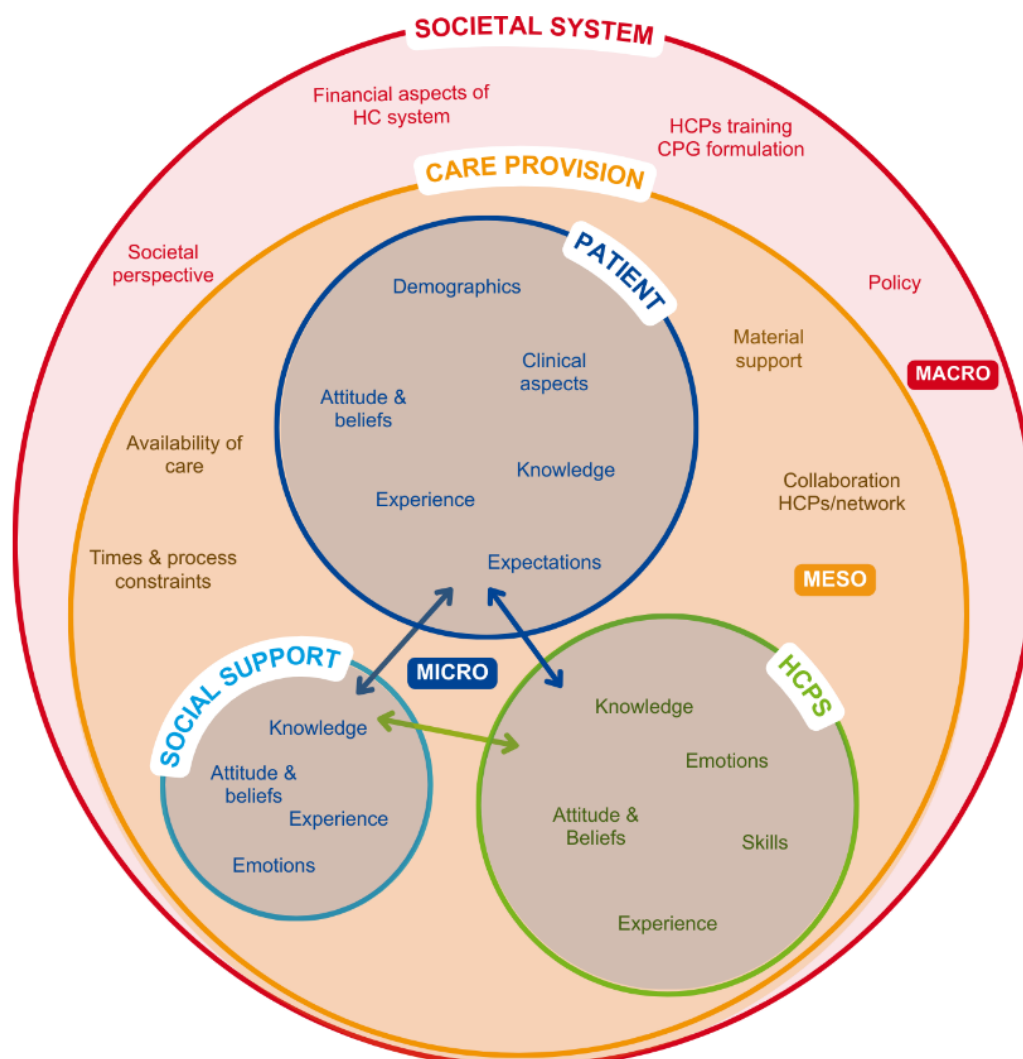


Figure 1 above highlights the interrelationship between societal, organisational and clinical dimensions, while Box 1 below provides a concrete example.



Box 1 – An example of the interrelationships between micro, meso and macro levels

Insufficient knowledge of pain and its mechanisms can influence effective care at the micro level (level of the individual and of relationships between individuals). It **can also fuel other obstacles such as unrealistic expectations or a lack of patient involvement** ('We must find the lesion responsible for my pain, a prescription will solve my problem, it's not up to me to find solutions').

This situation can be influenced by factors at the meso level (relationships with healthcare providers): if the way their work is organised allows healthcare providers to spend enough time with patients, they will be able to help them understand their problem better and take a more active part in their care. The expertise of specialised colleagues and educational tools can help them in this task.

However, the availability of tools, knowledge and experts also depends on the macro level (i.e. policy, the healthcare system and society as a whole), and on the choices made at this level regarding the organisation of care, the training of healthcare providers, the development of clinical guidelines, etc. The way society views (chronic) pain also influences the attitudes of patients, significant others and healthcare professionals.

Working on the education and training of healthcare providers (e.g. by making pain a recurring topic) can influence their attitudes, professional skills and the level of expertise within the healthcare system, but also better equip them to educate patients. This way, intervening at the macro level can have an impact on the beliefs and attitudes of individual patients at the micro level.

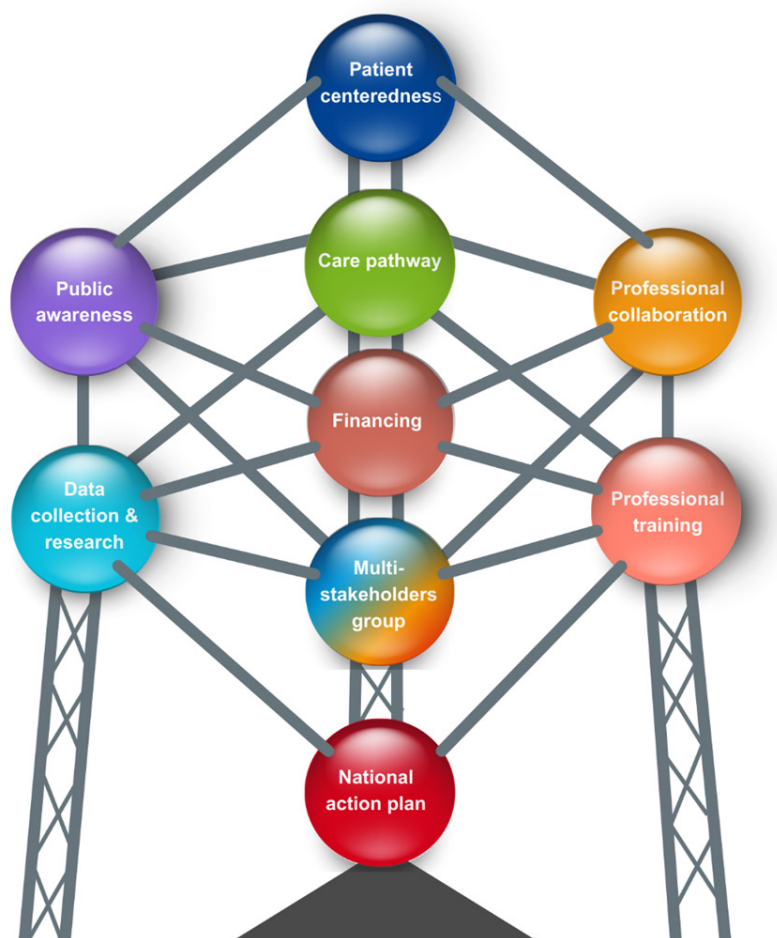
This study identified nine major domains of intervention, each associated with multiple action points.^a Various **stakeholders** (patient associations, professional associations in the health and social sectors, hospitals, sickness funds and government agencies) were asked to give their opinion on the acceptability, feasibility and priority of each action point, resulting in the final version presented below.

A key message is that improving multimodal pain management can only be achieved if all stakeholders are involved in a change of perspective, from the patient themselves to the general population, including professionals, teachers, researchers and decision-makers. The nine domains for action are interconnected like the spheres of the Atomium (see Figure 2).

Two domains of action – the development of a national action plan on pain and the establishment of a multi-stakeholder group – form the basis of the entire structure, as their aim is to support the logical, coherent and integrated implementation of the action points within the other domains.

^a The recommendations at the end of this document largely reflect the proposed action points. In this chapter, we will focus primarily on outlining the major stakes in each of the nine domains.

Figure 2 – Nine interconnected domains of intervention



3.2 Attention points for each of the nine domains of intervention

3.2.1 Improving patient empowerment by ensuring patient-centred care

A person-centred approach is defined as a **respectful, individualised approach that empowers patients** by encouraging **active participation** in their care and **shared decision-making**. This approach recognises and supports the essential role of the patient in managing their chronic pain, but also the importance of their trust-based relationship with their healthcare providers, i.e. a genuine therapeutic alliance between the patient and the professional(s) involved in their care. Together, they define realistic expectations and objectives (e.g. in terms of quality of life, return to work, etc.) and develop a strategy to achieve them.

3.2.1.1 Action points

Six action points have been identified, targeting patients themselves, professionals in the health, social and employment sectors, patient organisations, professional organisations and sickness funds. They aim to achieve the objectives listed below and are included in the recommendations at the end of this summary.

**Box 1 – Objectives of person-centred care**

- Encouraging patients to identify and express their needs, values and preferences and to use evidence-based information.
- Promoting patient information and education (particularly through the PNE) by professionals themselves, but also by other actors such as patient associations or sickness funds.
- Strengthening the knowledge, the clinical and human skills and the resources available to professionals.
- Strengthening social support (family, peers, professional circle) and its place in patient care.
- Ensuring that an individualised and tailored approach is accessible to all, including vulnerable populations.
- Promoting fluid communication with all stakeholders involved in the patient's care pathway.

3.2.1.2 Conditions and attention points

Person-centred care requires **professionals** to use **active listening, empathy, flexibility and communication techniques** to establish a therapeutic alliance based on mutual trust. Individualised care based on the biopsychosocial model also requires providing patients with **clear explanations and information**, educating them about pain neuroscience and teaching them how to best manage their personal situation. Pain education tools accessible via the patient's medical record could support healthcare professionals. The importance of **continuity of care** with the same professional is also emphasised, as a relationship of trust is built over time.

On the **patient's side**, empowerment requires support, particularly in navigating the multiple sources of information currently available on the internet and on social media. Increasing the number of access points to consistent, validated and understandable information could be helpful. Validated sources of information already exist in Belgium (see [Pain in Motion](#)). There are also structured tools to help patients who struggle to identify their own needs or to prepare for discussions with healthcare professionals (e.g. the ELADEB scale).

Particular attention must be paid to **vulnerable populations**, whether this vulnerability is related to age, low literacy, comorbidities, disability (e.g. hearing impairment), low socio-economic status, isolation, or linguistic or cultural barriers. As many tools already exist, a first step should be to take stock of available resources, assess their effectiveness and examine whether they actually meet the needs of this very diverse group of patients. The risk of stigmatisation is particularly high in this context and it is essential to respect each patient's choice, without pressure or judgement.

The major role of friends and family (and of the work sphere, if applicable) must be recognised and their involvement should be considered, with the patient's agreement. For instance, it might be appropriate to ask a person close to the patient to participate in PNE and pain management. In some cases, it may also be necessary to provide psychological support for significant others. **Volunteer patients and experts by experience (particularly recovered patients)** can also play an important role in peer support. However, these peers should receive training and supervision to be able to perform their role effectively.

Finally, beyond the motivation and skills of all involved, **sufficient financial and organisational support** must be provided to enable a tailored and patient-centred approach (e.g. offering both group and individual care).

3.2.2 Defining a care pathway

There is currently no clearly defined care pathway for patients with chronic (or subacute) pain in Belgium. The biopsychosocial approach still proves difficult to organise in primary care, and does not entirely convince many patients and healthcare providers. Smooth transitions between levels of care are also lacking: patients often struggle to access pain centres, but referring them back to primary care from these specialised structures seems equally problematic. Continuing or resuming a professional activity is also complicated, as even minimal adjustments to working conditions (e.g. flexible working hours, ergonomic adjustments) can be difficult to obtain.

3.2.2.1 Action points

A structured care pathway, based on **predefined steps**, would help both patients and professionals know when and where to turn to access the right care. Such a pathway already exists in other countries; in Belgium, it could be based on recent clinical guidelines (such as the clinical practice guideline on the Multimodal management of primary chronic pain (DCP) in primary care, available in [French](#) and [Dutch](#)) and on existing initiatives such as the professional reintegration pathways supported by the National Institute for Health and Disability Insurance (RIZIV – INAMI). Several objectives are linked to the establishment of a pain care pathway (see **Box 3**).

Box 2 – Objectives of a pain care pathway

- Improving quality of care and patient satisfaction by ensuring access to the right intervention at the right time for all, based on each person's individual situation and needs.
- Reducing the risk of pain becoming chronic.
- Harmonising the main aspects of care and limiting variability between providers and care environments.
- Bridging the gap between clinical guidelines and real-world practice.
- Optimising the use of available resources by avoiding unnecessary interventions, repeat diagnostic procedures, etc.
- Lowering the risk of long-term work disability.

Defining the specific content of this pathway falls beyond the scope of this study, but some possible courses of action and attention points were identified and confirmed by stakeholders (see **Box 4**).

Preconditions were also formulated to facilitate the implementation of this pathway. A first step would be to identify the various services currently involved in pain management, and to analyse their geographical distribution (see section 3.2.3) and the quality of their services. Practical tools to facilitate the referral of patients at risk/suffering from chronic pain also need to be defined.

Box 3 – Key elements of an ideal pain care pathway

- **Anticipate:**
 - Start interventions during the subacute phase or before surgery.
 - Ensure early identification and monitoring of risk factors for chronicity, using validated tools.
 - In the presence of such risk factors, offer patients early treatment to prevent chronicity.
- **To each their role:**



- **Make the role of each professional and line of care clear (with explicit criteria for referrals)**, both for the professionals themselves and for their patients.
- Strengthen the role of primary care in the assessment and multimodal management of pain.
- Consider the role of secondary care, e.g. as an intermediate service between primary healthcare and multidisciplinary pain centres (see section 3.2.3).
- Let multidisciplinary pain centres focus on the most complex cases, while providing support to other professionals in primary and secondary care.
- Organise collaboration between primary, secondary and tertiary care, as well as with stakeholders in the social care and employment sectors.
- Facilitate discharge from pain centres and return to primary care.
- **Support patients:**
 - Place pain neuroscience education at the heart of the pathway and support patient empowerment (see section 3.2.1).
 - Provide support (e.g. online platform, personalised reminders, etc.) to help patients navigate the care pathway more effectively.
 - Consider the added value of a case manager if needed.
- **Appropriate and accessible care:**
 - Tailor the provision and intensity of biopsychosocial care to the needs of patient groups (proportionate universalism).
 - Facilitate access to multimodal pain management with a fast-track access option, in all lines of care.
 - Consider the possibility of continuing or resuming work as early as possible in the pathway.
 - Ensure regular assessment of patient outcomes, taking into account the objectives of the care plan.

3.2.2.2 *Conditions and attention points*

Given how diverse individual situations can be (in terms of the clinical presentation of pain, of the patient's experience and circumstances, etc.), a single uniform pathway for all makes little sense. A more relevant option would be **a basic, but modular pathway**, to which elements can be added based on individual needs and circumstances.

Strengthening the **role of primary care** is necessary and widely supported both by available literature and by Belgian stakeholders. However, this also raises a number of challenges, such as the limited training of these professionals in this specific field, the already excessive workload of general practitioners, and the small number of psychologists specialising in pain.

Existing **pain centres** are often overburdened, and their organisation and funding should probably be reconsidered to allow them to fulfil their role of supporting other lines of care, but also to get involved in individual cases without delay if necessary (including during the subacute or transitional phase for patients in complex situations).

It is also important to support research around the **risk factors for transition to chronicity**, which are well known for lower back pain but not for other chronic pain conditions.

3.2.3 Strengthening interprofessional collaboration

While multimodal pain management can theoretically be provided by a single healthcare provider, in practice, it often involves multiple healthcare professionals, and sometimes also professionals from the social care and work sectors. The ability to involve a **multidisciplinary team** and diverse expertise is essential, both in primary and in specialist care.

However, **collaboration and communication** between professionals remain a challenge. Among the most notable barriers are an unclear definition of the roles and responsibilities of the various professionals involved in the care pathway, the absence of a “common language” (e.g. different assessment tools, classifications and terminologies) and a lack of interoperability and efficiency between the IT tools used for interprofessional communication.

3.2.3.1 Action points

Actions can be taken at three main levels:

- Creating (non-hierarchical) **interdisciplinary networks** to bring together a range of professionals from the health and social sectors within a geographical area, possibly coordinated on a voluntary basis by a multidisciplinary pain centre (provided with the necessary support for this additional task). A database of professionals with specific skills in pain management could be particularly valuable. Being able to rely on a network of known or easily identifiable contacts would facilitate knowledge exchange and access to resources and expertise.
- Organising **multidisciplinary consultations** around the patient (and possibly his or her loved ones).
- Improving **communication** between professionals (common language, effective communication channels, appropriate IT solutions, etc.).

3.2.3.2 Conditions and attention points

This domain of intervention highlights the need to link pain management with integrated care projects. The ultimate aim is to promote collaboration between services organised at different levels (federal, federated entities, etc.) and belonging to different sectors (health and social), three different lines of care and various disciplines.

In theory, the quality of care can only be improved through better communication and collaboration between the various stakeholders, in whichever form. However, it is important to bear in mind that any effort to coordinate and “pool” resources requires considerable **time**, which should be taken into account in funding mechanisms. Aside from financial considerations, the excessive workload of primary care professionals and pain centres is also an issue.

Furthermore, strengthening collaboration should obviously build on **existing structures** (e.g. regional care zones).

Finally, communication between professionals (particularly if it extends beyond the healthcare sector) also raises **confidentiality** issues when sharing data.

3.2.4 Improving the training of healthcare professionals

A biopsychosocial and multimodal approach to pain requires professionals to possess **both specific** (regarding the clinical aspects of pain and its management) **and more general skills** (interpersonal skills, collaboration, etc.). In Belgium, training provision in this area remains generally too **limited and extremely variable**, and all consulted sources agree on the need to strengthen it at every level (initial, specialised and continuing education).



3.2.4.1 Action points

Six action points have been defined in this domain (see section 5.4.4 of the scientific report). The aim is to define content that is **tailored** to each discipline and level of education, based on what already exists (clinical practice guidelines, IASP or EFIC^b resources, etc.).

Beyond the specific clinical skills required for chronic pain management, particular attention should be paid to certain **aspects of professional practice** (partnership with the patient, collaboration with other professionals, multidisciplinary work, etc.) from a very early stage in the curriculum. Collaboration between teachers, departments and educational institutions is essential to promote consistency and a common language.

To encourage **participation**, the development of creative training programmes should be promoted, using innovative teaching approaches and involving expert patients or local scientific opinion leaders. Incentives could potentially be considered (e.g. accreditation points for continuing education, attractive participation fees, geographical proximity or remote learning).

The **assessment** of the short-, medium- and long-term **impact** of these courses should be planned from the outset, and research into the factors influencing this impact should also be supported.

3.2.4.2 Conditions and attention points

It would be unrealistic to expect a complete overhaul of the training around multimodal chronic pain management overnight: this will take **time**, **resources** and a genuine **commitment** on the part of education institutions to overcome existing obstacles and establish long-lasting collaborations.

On a side note, all (future) healthcare professionals and their teachers need to be reminded that clinical expertise and patient values are as important as evidence-based data in the concept of “*evidence-based practice*” – a fundamental truth that still seems insufficiently understood and accepted.

Finally, the possibility of a **formal recognition** of acquired skills, e.g. through a professional title, should be explored. This could help healthcare providers (and patients) to better navigate the healthcare offer.

3.2.5 Raising public awareness

A lack of knowledge about pain, about its causes and about its underlying mechanisms affects not just patients and professionals, but also the general population. For patients, it can lead to a lack of social support or even to **stigmatisation**. However, it can also be a barrier to the effective implementation of health promotion advice (e.g. regular physical exercise) and to better self-management of pain to reduce the risk of chronicity.

3.2.5.1 Action points

In many countries, public awareness and education are considered a crucial factor in any strategy to improve pain management. **Awareness campaigns** in (traditional and social) media are the most obvious approach, if possible in combination with events (e.g. exhibitions, “pain walks”, etc.) that will reinforce their impact. A more innovative approach could be to develop **pain education in schools** for healthy children and adolescents.

3.2.5.2 Conditions and attention points

Obstacles to awareness campaigns include the multiplicity of objectives and target groups, which can reduce their effectiveness in capturing public attention and resources. The cost-effectiveness of each option (television, radio, social media, etc.) must be thoroughly evaluated with regard to

^b EFIC: European Federation of Pain

objectives, target audiences, expected effects and required budgets (as proposed in the technical data sheets of the Federal Public Service Chancellery of the Prime Minister on media campaigns).

Furthermore, given the variable **health literacy level** of the Belgian population, it is essential to make sure the message will be clear for everyone. The best way of reaching the desired target audience also warrants careful consideration, particularly when campaigns are aimed at the vulnerable groups.

3.2.6 *Developing an appropriate funding model*

The way healthcare is financed has a decisive impact on how it is provided and on its accessibility to patients. In Belgium, the current financing system **does not adequately compensate a biopsychosocial approach, person-centred care and interprofessional collaboration**, which may discourage some providers from fully committing to it.

Patients can also be faced with substantial copayments, e.g. because some services are not sufficiently covered by the mandatory health insurance or because of a lack of “conventioned” healthcare providers working for agreed official fees. This can complicate access to care, especially for people who find themselves without a professional income due to their pain issue.

The budget allocated to some **multidisciplinary pain centres** by the authorities (federal public service for public health (FPS HFCSE)) does not fully cover their operating costs and the fulfilment of their legal duties. Other centres operate without any external funding, and have no other option than charging a co-payment. A note published in December 2025 by the federal public service for public health^c stresses that the current financing system needs to be thoroughly reviewed to implement an integrated, evidence-based model.

3.2.6.1 *Action points*

While the financing of care (and particularly of the time devoted to a biopsychosocial approach and to collaboration) is undoubtedly in need of some redesigning, it is difficult to make concrete recommendations at this point in time, as both the nomenclature of services covered by the mandatory health insurance and the hospital financing system are currently undergoing in-depth reforms. The funding of biopsychosocial and multimodal pain management needs to be included in these discussions.

3.2.6.2 *Conditions and attention points*

The ongoing revision of the nomenclature highlights the compartmentalisation (by profession) of the Belgian healthcare system. To avoid adding to the fragmentation and complexity of the system, the financing of chronic pain management should be **considered from a broader perspective** (i.e. ‘how to finance the management of chronic diseases in general’), using mechanisms known to facilitate the integration of care. This would have the added advantage of standardising access to certain rights for people with chronic or complex health problems, thereby contributing to greater equity.

If changes to the funding model are proposed (e.g. a mixed system combining fee-for-service and fixed payments), they should be tested in the field before being rolled out on a larger scale.

^c A summary (in French or Dutch) is available on <https://www.health.belgium.be/fr/themes/sante/organisation-soins-sante/programmes-soins/maladies-chroniques/gestion-douleur-lhopital>



3.2.7 Encouraging data collection and research

High-quality data is absolutely essential for all forms of scientific research, including research aimed at evaluating and improving the quality, organisation and funding of healthcare. In Belgium, there is little data available on chronic pain. Data collection could be useful for several reasons, ranging from a better understanding of the epidemiology of pain to the assessment of treatment options (see Box 5).

However, several obstacles have been identified, such as concerns about privacy and the GDPR, the very nature of chronic pain, which is invisible and difficult to measure, and the human and financial resources needed to ensure the sustainability of information systems. International experiences show that the success of data collection for registries is determined by the nature and conciseness of the data collected, but also by the chosen IT solutions. Providing feedback to the professionals in the field who supply the data also contributes to supporting the process.

3.2.7.1 Action points

A **major challenge in any data collection** effort is to combine usefulness with practical feasibility and sustainability. Using existing data sources (administrative data, medical records, health surveys, etc.) is one possible approach; its main advantage is that it causes no additional workload for healthcare providers. However, it only allows the collection of limited information. Creating dedicated registries is another option, but requires an in-depth cost-benefit assessment beforehand. The data that is already being collected in pain centres is another potential avenue to explore. However, stakeholders stress that obtaining data from primary care is also essential to avoid overlooking a significant part of the target population.

With regard to research on pain management, several points have been mentioned in the literature and by stakeholders and could be grouped together in a research agenda.

Box 4 – Objectives of data collection on chronic pain

- Assessing the scale of the problem in Belgium.
- Improving the knowledge of healthcare professionals, patients, decision-makers and employers about pain.
- Supporting the evaluation of the quality of primary, secondary and tertiary care.
- Supporting the evaluation of social care (e.g. support for returning to work).
- Supporting the evaluation of the quality of training.
- Supporting the development of quality indicators.
- Supporting the identification of scientific research topics.

3.2.7.2 Conditions and attention points

Here too, the availability of sufficient financial and human **resources** is an essential prerequisite.

If a new data collection is planned in primary care or in pain centres, it is essential to consider its objectives, the data to be collected and the criteria that will guarantee their quality (e.g. consistent definitions and terminology, harmonisation of practice, frequency of collection) **beforehand**.

The use of existing data also poses a number of **practical challenges**, such as IT adaptations or harmonisation and coordination efforts.

Finally, the research itself requires **prioritisation** of the topics to be addressed, which could be one of the tasks of the multi-stakeholder group mentioned in the following point. More broadly, patients

and all relevant professionals (in the health sector and beyond) should be **involved** in developing the research agenda and conducting studies to ensure their relevance and usefulness.

3.2.8 *A multi-stakeholder working group*

As pain can be linked to many diseases and areas of the healthcare, social and employment sectors, **the support of all relevant stakeholders** is essential to any strategy targeting this issue.

In Belgium, there is currently no national organisation bringing together both patients and healthcare providers around pain, which means their voice is fragmented.

3.2.8.1 *Action points*

A multi-stakeholder working group on pain, similar to those that already exist in other countries (and, in Belgium, in other areas such as cancer), could help increase awareness of chronic pain as a policy priority, improve the consistency of implemented measures and ensure more representative cross-sector coordination. This group could pursue several objectives (see Box 6).

Box 5 – Objectives of a multi-stakeholder group

- Increasing knowledge about pain among decision-makers and other actors involved in policy-making.
- Defining patient needs and supporting decision-makers in setting priorities, objectives and resources to improve chronic pain management in Belgium.
- Improving coordination between health and social care professionals, strengthening local collaboration capacities, and developing and disseminating clinical practice guidelines and examples of good practices related to pain.
- Stimulating collaboration between governments, legislators, professional organisations, patient experts, NGOs, researchers, employers and other stakeholders involved in chronic pain management.
- Monitoring the implementation of policy decisions.
- Identifying research priorities and communicating these priorities to relevant funders.

3.2.8.2 *Conditions and attention points*

All relevant stakeholders (i.e. the representatives of patients, health and social care professionals, sickness funds; the research, training and employment sectors; and policy makers) must be included in this multi-stakeholder group. Collaboration and agreement between the federal authorities and the federated entities will be necessary to get this group up and running. The complex coordination, potential administrative burden and risk of slow decision-making due to potential diverging interests among stakeholders might prove to be major challenges.

This group will need to be provided with the necessary resources and its effectiveness will have to be assessed, while keeping in mind that the process will require a certain amount of patience.

3.2.9 *A National Action Plan on Pain*

Political conviction ensuring the active involvement of decision-makers is an essential prerequisite for moving towards the use of the biopsychosocial model in pain management. Each of the action points mentioned above requires strong support, which is often determined by society and its representatives.



3.2.9.1 Action points

One strategy highlighted in literature to strengthen political involvement is **the creation of a national action plan**, a sort of roadmap encompassing all the desired action points, from patient empowerment to public awareness over the establishment of a care pathway, collaboration between stakeholders, professional training, funding, research, etc. **Such a plan would materialise political willingness and help coordinate initiatives at all levels of power** (federal and federated entities) **and in all sectors** (health, social, education, employment, etc.). It might also increase media interest.

3.2.9.2 Conditions and attention points

Several barriers have been identified in this domain of intervention, including competition from other political priorities, institutional fragmentation, possible lack of interest from decision-makers, and lack of funding to support the plan.

As mentioned above, the proposed action points are all complex to implement. Clear **goals** must therefore be defined from the outset, with concrete tools to support their achievement, and **monitoring** and **evaluation** of progress towards these goals must be planned beforehand. It is also important to establish realistic timelines.

Certain **levers** have been identified to encourage political involvement, such as highlighting the burden of chronic pain for both patients and society, gauging the potential benefits of better pain management (e.g. expected savings) and ensuring the feasibility of the suggested interventions (e.g. by starting with small-scale actions that can easily demonstrate their effectiveness).

4 CONCLUSION

This study highlights the complexity of pain, but also of its management. A considerable number of actors can play a role in improving the situation, and each of them needs the support of the others: patients alone cannot acquire the necessary skills, while healthcare professionals need adequate training, clinical practice guidelines, patient education material, time and resources to provide person-centred care and collaboration with other professional stakeholders.

Beyond the importance of collaboration and interrelationships between stakeholders and sectors, **a real paradigm shift is needed in society** to support policymakers and ensure that **care for patients with chronic pain** is appropriate and truly integrated.

The relevance and urgency of this issue are already reflected in various (policy) initiatives. Our nine domains of intervention are fully in line with the objectives set out for healthcare, for the integration of psychological support into primary care and for promoting return to work. Implementing the measures outlined in this report could therefore contribute significantly to achieving existing goals and promoting policy coherence.

■ RECOMMENDATIONS^d

POLICY VISION: NATIONAL ACTION PLAN AND MULTI-STAKEHOLDER GROUP

To stress the importance of this issue, it is essential to highlight the impact of chronic pain both on individuals and on society, as well as the positive effects expected from improved care. The need to address this issue is all the more obvious for its commonalities with the objectives set out in healthcare^e and integrated care, as the action points proposed in this report are means of putting policy makers' commitments to these healthcare objectives into practice.

To all stakeholders mentioned below, we recommend:

1. Viewing the following recommendations as an **interconnected whole** that reinforces a **common vision** of chronic pain, in which each stakeholder has a role to play and existing evidence-based practices are highlighted.

To the Minister of Social Affairs and Public Health and the Ministers of Health of the federated entities, we recommend, after consulting with their relevant administrations:

2. Joining forces with the Ministers of Employment and Higher Education to develop an **integrated strategy for the management of subacute and chronic pain**. By integrated strategy, we mean introducing actions in the nine domains of intervention identified in this study. This involves accurately defining objectives, expected effects, the time frame for achieving them (to be adapted in function of local circumstances), and the stakeholders responsible for each action. Assessing the implementation of the various measures, with transparent reporting of the results, must be an integral part of this strategy.
3. Publishing this integrated strategy as a **national action plan on pain, bringing together the federal and federated authorities responsible for health, social affairs, employment and education**. To this end, a protocol agreement should be signed by all relevant federal and federated authorities. An option could be to include patients with chronic pain in the scope of the protocol agreement of 8 November 2023 between the federal authority and the federated entities around health policy (Interfederal Plan for Integrated Care).
4. Establishing a **multi-stakeholder group** bringing together representatives of patients, health and social care professionals, sickness funds, the research, education and employment sectors, and policymakers (at both the federal and regional levels). This group should include the Belgian stakeholders already involved in the field of pain management. Coordination should be ensured by the Belgian Chronic Disease Observatory^f to avoid scattering resources by creating a wholly new structure. This multi-stakeholder group must be given a clear mandate, a clearly defined decision-making process and sufficient resources to ensure the effectiveness and continuity of its operation. The group's missions are: supporting the authorities in developing the stages of the national action plan on pain, monitoring the implementation of the action points, highlighting successes and failures in order to encourage collaboration and sharing best practices between professionals in the various sectors involved (health, social services, employment, training, etc.).

^d The KCE has sole responsibility for the recommendations.

^e <https://www.inami.fgov.be/fr/presse/l-avis-sur-les-objectifs-en-matiere-de-soins-de-sante-sur-la-table-du-conseil-general-de-l-inami>

^f Prerequisites to allow the Chronic Disease Observatory to successfully carry out this task include a clear definition of the mission and scope of action, and support from the other parties involved. This group will also need a leader with sufficient expertise in the management of chronic pain, and the necessary skills to play a leading and supportive role.



PUBLIC AWARENESS

To the Minister of Social Affairs and Public Health, the Ministers of Health of the federated entities, the RIZIV – INAMI and the Federal Public Service Health, Food Chain Safety and Environment (FPS HFCSE), we recommend, after consulting with their relevant administrations:

5. Planning **regular public awareness campaigns on pain** based on existing experiences and alternating between different objectives, target audiences, expected effects, messages and media channels, taking into account the cost-effectiveness of each option. The topics of such campaigns could be different every time, starting with the concept of pain as described in the most recent neuroscience studies. The need for biopsychosocial care could be explained at a later stage, as could the existence of a care pathway, should one be developed.

GUIDELINES AND CARE PATHWAY

To professional and scientific organisations of professionals involved in pain management, in collaboration with the hospital sector (including pain centres), sickness funds and patient organisations, we recommend:

6. Supporting the implementation of the **Belgian clinical practice guideline** “Multimodal management of primary chronic pain (PCP) in primary care”.
7. Developing other evidence-based clinical practice guidelines and assessment tools to meet needs not covered by the abovementioned guideline.
8. Providing healthcare professionals with evidence-based **patient information sources and tools**, written in easy to understand language and adapted to different levels of health literacy, to allow them to easily and accurately inform their patients about pain as a concept and about pain management.
9. Developing a national multidisciplinary **care pathway** including several stages, starting as soon as there is a risk of chronic pain. This pathway must be flexible enough to adapt to each patient’s situation (type of pain, social and professional context, etc.). It should clearly define the role of each professional and line of care, support patient empowerment, facilitate access to biopsychosocial management, offer several management options, address the question of continuing or resuming work as early as possible, and regularly assess outcomes for the patient, taking into account the objectives of the care plan.
10. Providing **support to patients** (e.g. online platform or personalised reminders) to facilitate navigation through the care pathway.
11. Defining the **necessary conditions for the implementation of the chronic pain care pathway**, including financial and organisational resources required for each line of care. Identifying the services currently involved in pain management and analysing the available offer in relation to needs should be the first step.

TRAINING FOR PROFESSIONALS

To the higher education sector (universities and university colleges), to professional organisations in the healthcare sector and to the relevant federal authorities, in collaboration with the hospital sector and patient organisations, we recommend:

12. Including the acquisition of **clinical skills** specific to pain and its management and of **practical skills** for collaborating with patients and other professionals in the objectives of the **initial and continuing education** of healthcare professionals. This requires drawing on clinical practice

guidelines, on the latest scientific recommendations and on existing tools and strategies, like the resources of the European Pain Federation (EFIC) and of the International Association for the Study of Pain (IASP).

13. Starting to encourage collaboration between professionals during education, by organising **multidisciplinary training**.
14. Developing **creative training programmes** to encourage participation, using innovative teaching approaches and flexible formats, like e.g. local scientific opinion leaders, expert patients, and a mobile team of trainers specialising in pain.
15. Defining a **coherent overall vision for pain training** by setting up collaborations between teachers in the same discipline, between teachers in the healthcare and social care sectors, and between higher education institutions and professional organisations. A continuing education structure bringing together various health(care) disciplines could help develop the training programmes.
16. Promote **specialised training** in pain management to address the shortage of professionals (psychologists, doctors, etc.) specialising in this field in primary and secondary care.
17. Assess the **impact of all pain training programmes in the short, medium and long term**, both on the skills of professionals and on patient outcomes.

INTERPROFESSIONAL COLLABORATION

To the Minister of Social Affairs and Public Health and to the federated entities, in collaboration with the federal public service for public health (FPS HFCSE), RIZIV – INAMI, the relevant professional organisations, the hospital sector (including pain centres) and patient associations, we recommend:

18. **Strengthening the role of primary care** in the assessment and multimodal management of pain; for example, recent investments to support front-line psychologists in the global plan of the Minister of Health could benefit patients with chronic pain and their families.
19. Allowing **pain centres** to focus on the most complex pain cases, while also providing support to professionals in primary and secondary care.
20. Facilitating **interprofessional collaboration** between primary, secondary and tertiary care, as well as with the social care and employment sectors. This could involve encouraging local collaboration initiatives within primary care in each “healthcare area” or establishing a geographical network (suitable to the local context) to enable sharing information and experiences between different services within the healthcare sector, as well as with social care stakeholders. Such networks could be coordinated by a local pain centre on a voluntary basis, with the necessary financial and logistical support.
21. Developing and improving the use of **interprofessional collaboration tools** for clinical practice, like e.g. standardised pain assessment tools, access to shared medical records for involved healthcare professionals so they can register all relevant patient information, and new IT solutions for secure communication between healthcare and social care professionals. IT solutions (see e-health plan) must be integrated in the overall strategy to facilitate communication between healthcare professionals, taking into account the requirements of the GDPR and the interoperability of IT systems (*Belgian Integrated Health Record – BIHR*), and must not increase the administrative burden on healthcare professionals.
22. Encouraging participation in **continuing education** on pain, by offering accreditation points to participants and supporting the accessibility of these courses.



23. Creating a regularly updated **database** of professionals specialising in pain management and making it available to all healthcare professionals. This requires official recognition professional qualifications and trainings. Professionals must also agree to be included in this database.

PERSON-CENTRED APPROACH

To patient associations, professional healthcare and social care organisations, sickness funds, and the hospital sector, we recommend:

24. **Providing patients** with evidence-based information about pain and its management. Evidence-based material adapted to the Belgian context already exists for pain neuroscience education (e.g. Pain in Motion).
25. Encouraging **patients** to express their needs, values and preferences, to prepare their contacts with healthcare professionals, to take into account the evidence-based information available to them, and to discuss their situation with their partner, family, friends, colleagues and employer. Using structured tools should be considered to help patients identify their needs and prepare for discussions with healthcare professionals.
26. Promoting **social support** as a key element of person-centred care in the care pathway, e.g. by involving significant others in care with the patient's consent, offering psychological support to them if necessary, or setting up peer groups or volunteers (experts by experience) who can help other persons faced with similar situations. These peers and volunteers should receive training, support and supervision to ensure they provide high quality services.
27. Paying particular attention to **vulnerable populations** throughout the care pathway and providing them with specific support. Many resources tailored to different types of vulnerability are already available, and these should be inventoried, assessed and disseminated before new ones are developed.⁹
28. Promoting fluid communication with **occupational physicians, the medical advisors of the sickness funds and employers** to better understand and raise awareness of the implications of pain for work, and to facilitate the necessary adjustments to working conditions.

FINANCING

To the Minister of Social Affairs and Public Health, the federated entities, the federal public service for public health (FPS HFCSE) and RIZIV – INAMI, we recommend:

29. Considering adjustments to the **financing** of chronic pain management in the context of the current revision of the nomenclature and financing of hospitals.
- To encourage a multimodal approach, person-centred care and interprofessional collaboration, a shift from a fee-for-service system to a mixed system (similar to the funding techniques used in integrated care, see KCE report 359) should be considered.
 - To discourage the use of non-evidence-based care, the new funding model for pain management should be based on clinical practice guidelines and recent evidence.
 - Testing financial changes through appropriately designed studies (e.g. virtual payments or testing with volunteer professionals) would be advisable.

⁹ Based on the royal decree of 18th July 2013 exposing the federal strategy on long-term sustainable development (BS-MB 08/10/2013), including access to qualitative healthcare for all and particularly for vulnerable populations.

30. Reviewing the current **funding system of pain centres** to support the biopsychosocial approach, by **linking it to an annual assessment of the quality of care (e.g. through audits and an analysis of quality indicators yet to be defined)**. This analysis should include all pain centres, whether or not they are funded by the federal public service for public health (FPS HFCSE). Feedback to the centres and transparent reporting of the aggregated results by the FPS HFCSE) are important.
31. Ensure financial support for **multidisciplinary consultations** between patients with chronic pain, doctors and other health and social care professionals.
32. Setting aside a **specific budget** to include patients with chronic pain in the integrated care programme, run the multi-stakeholder group, carry out public awareness campaigns, and encourage research on pain.

DATA COLLECTION AND RESEARCH

To research institutions and universities, we recommend:

33. Assessing the **prevalence and/or incidence** of chronic pain in Belgium to support the measures to be implemented, by adding questions on chronic pain to the health interview survey conducted by Sciensano^h.
34. Considering adding chronic pain to the chronic disease categories of the Belgian PaRIS project, to obtain an estimate of **patient-reported experiences and outcomes (PREMs and PROMs)** in people with chronic pain treated in primary care.
35. Assessing the **financial and human resources** required to collect specific data on pain, and weigh these resources against the added value of this data for decision-making. Defining the objectives of this data collection and the sources of data (e.g. primary care or pain centre) is absolutely essential. If a specific pain data registry is considered, its primary purpose should be to identify patients who could benefit from participation in a clinical trial or other research likely to improve their health.
36. Developing a **research agenda** focused on pain, taking into account research topics already identified in Belgium and internationally, and involving patients and relevant professionals in the choice of research topics. This could be a task for the multi-stakeholder group. Some previously identified topics deserve particular attention: identifying risk factors for chronicity in pain other than low back pain, implementing communication strategies, educating children and/or adolescents on pain neuroscience in schools, and developing educational tools to improve the training of healthcare professionals.

^h These health interview surveys have included questions about pain since 2008, but these focus on pain during the last four weeks and do not investigate duration or recurrence.



COLOPHON

Title:	Nine domains of intervention to improve the multimodal management of chronic pain in Belgium – Synthesis
Authors:	Pascale Jonckheer (KCE), Anja Desomer (KCE), Nadia Benahmed (KCE), Bénédicte Vos (KCE), Dorine Lenoir (KCE)
Project manager:	Irm Vinck (KCE)
Information specialist:	Nicolas Fairon (KCE)
Stakeholder involvement	Marie Dauvrin (KCE), Céline De Jaegher (Vlaams Patiëntenplatform (VPP)), Diane-Estelle Ngatchou-Djomo (Ligue des Usagers des Services de Santé (LUSS)), Sophie Ripault (LUSS)
External experts:	Anne Berquin (Université catholique de Louvain (UCLouvain)), Susan Broekmans (Universitair Ziekenhuis Leuven (UZ Leuven)), Marleen Corremans (Ebpracticenet, JBI Belgium centre for Supporting Evidence-based Health Care (JBI Belgium)), Geert Crombez (Universiteit Gent (UGent)), Leen De Coninck (Werkgroep Ontwikkeling Richtlijnen Eerste Lijn (WOREL), KU Leuven), Christophe Demoulin (Université de Liège (ULiège)), Lies Grypdonck (Rijksinstituut voor ziekte- en invaliditeitsverzekering – Institut national d'assurance maladie-invalidité (RIZIV – INAMI)), Guy Hans (Universitair Ziekenhuis Antwerpen (UZA), Universiteit Antwerpen (UAntwerpen)), Wouter Munneke (Vrije Universiteit Brussel (VUB), ULiège), Jo Nijs (VUB, UZ Brussel, University of Gothenburg, Zweden), Carolien Strouwen (Centre belge pour l'Evidence-Based Medicine – Belgisch Centrum voor Evidence-Based Medicine (CEBAM)), Peter Van Wambeke (UZ Leuven)
Stakeholders:	Bert Bammens (Katholieke universiteit Leuven (KU Leuven)), Valentine Barbeaux (Université libre de Bruxelles (ULB)), Jean-Luc Belche (ULiège), Yasmina Bellen (UZ Brussel, Pijnkliniek), Vincent Bonhomme (Centre hospitalier universitaire de Liège (CHU de Liège, ULiège)), Audrey Bonnelance (Réseau multidisciplinaire d'échange scientifique (RESUMES)), Laetitia Buret (ULiège), Vera Callebaut (UZA, Multidisciplinair Pijncentrum), Emilia Capront (ULB), Ann Cleerbout (Karel de Grote, Hogeschool), Karin Cormann (Fachbereichsleiterin Gesundheit und Senioren, Ministerium der Deutschsprachigen Gemeinschaft), Freya Couvin (FOD Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu - SPF Santé publique, Sécurité de la Chaîne alimentaire et Environnement (FOD VVVL – SPF SPSCAE)), Véronique Crutzen (SPF Emploi, Travail et Concertation sociale – FOD Werkgelegenheid, Arbeid en Sociaal Overleg), Jacinthe Dancot (Haute Ecole Robert Schuman, ULiège, Association belge des praticiens de l'art infirmier (ACN)), Jasmien De Doncker (Thomas More, Hogeschool), An De Groef (UAntwerpen), Alfons De Schutter (Wetenschappelijke Vereniging voor Vlaamse Kinesitherapeuten (WVVK)), Sofie Eerens (Hogeschool Gent (HOGENT)), Anne-Marie Etienne (ULiège), Inn Fichet (GO! Onderwijs van de Vlaamse Gemeenschap), Maximilien Gourdin (Université de Namur), Kelly Ickmans (VUB, Pain in motion), Hans Isselee (KU Leuven), Julian Jakupi (Beroepsvereniging voor kinesitherapeuten (AXXON)), Lotte Janssens (Rehabilitation Research Center (REVAL), Faculteit Revalidatiewetenschappen, Universiteit Hasselt (UHasselt)), Caroline Joris (SPF Chancellerie du Premier Ministre – FOD Kanselarij van de Eerste Minister), Hanne Kindermans (UHasselt), Vinciane Magotteaux (Hôpital de Libramont), Mira Meeus (UAntwerpen), Anne-Marie Offermans (ULB), Thomas Orban (RESUMES), Kathy Pletinckx (Odisee, Hogeschool), Sam Schelfout (UZ Gent), Nicolas Tajeddine (UCLouvain), Stefan Teughels (Domus Medica), Diana Torta (KU Leuven), Turgay Tuna (ULB), Joachim Van Cant (ULB), Stefaan Van Damme (UGent), Jet Van Hoek (Algemene Unie van Verpleegkundigen van België (AUVB)), Omer Van Haute (FOD VVVL –



SPF SPSCAE), Jessica Van Oosterwijck (UGent), Damien Wathélet (INAMI – RIZIV)

External validators: Lorimer Moseley (University of South Australia, Australia), Marcelo Rivano (Skane University Hospital, Lund University, Sweden), Davina Wildemeersch (UZA)

Acknowledgements: We would like to warmly thank all patients from patient associations and healthcare professionals from pain centers who participated to our interviews. We would like also to thank all the stakeholders who took part in our online survey.

We thank Laurent Lepère (Académie de recherche et d'enseignement supérieur (ARES)) and Catherine Stalmans (ARES) for explanation on the organisation of the French-speaking colleges and universities in Belgium.

Finally, we thank Manon Choinière (Centre de recherche du Centre hospitalier de l'Université de Montréal, Canada), David Holloway (electronic Persistent Pain Outcomes Collaboration (ePPOC), Australasian Health Outcomes Consortium, Faculty of Science, Medicine and Health, Australia) and Ruth Zalansky (Dept of Anesthesiology and Intensive Care, Universitäts klinikum Jena, Germany) for sharing their experience on pain data registry.

Reported interests KCE members: KCE is a federal institution funded by INAMI-RIZIV, by the Federal Public Service of Health, Food chain Safety and Environment, and by the Federal Public Service of Social Security. KCE's mission is to advise policymakers on decisions relating to health care and health insurance on the basis of scientific and objective research. It is expected to identify and shed light on the best possible solutions, in the context of an accessible, high-quality health care system with due regard for growing demand and budgetary constraints. , KCE has no interest in companies (commercial or non-commercial, i.e. hospitals and universities), associations (e.g. professional associations, unions), individuals or organisations (e.g. lobby groups) that could be positively or negatively affected (financially or in any other way) by the implementation of the recommendations. All experts involved in the writing of the report or the peer-review process completed a declaration of interest form. Information on potential conflicts of interest is published in the colophon of this report. All members of the KCE Expert Team make yearly declarations of interest and further details of these are available upon request.

Reported interests: 'All experts and stakeholders consulted within this report were selected because of their involvement in the topic of chronic pain management. Therefore, by definition, each of them might have a certain degree of conflict of interest to the main topic of this report'.

Layout: Ine Verhulst

Disclaimer:

- The external experts were consulted about a (preliminary) version of the scientific report. Their comments were discussed during meetings. They did not co-author the scientific report and did not necessarily agree with its content.
- Subsequently, a (final) version was submitted to the validators. The validation of the report results from a consensus or a voting process between the validators. The validators did not co-author the scientific report and did not necessarily all three agree with its content.
- Finally, this report has been approved Choose an item. by the Executive Board.
- Only the KCE is responsible for errors or omissions that could persist. The policy recommendations are also under the full responsibility of the KCE.

Publication date: 22 January 2026



Project number: 2021-07
Domain: Health Services Research (HSR)
MeSH: Chronic Pain; Models, Biopsychosocial; Pain management; Patient education
NLM Classification: WL 704
Language: English
Format: Adobe® PDF™ (A4)
Legal depot: D/2026/10.273/10
ISSN: 2466-6459
Copyright: KCE reports are published under a “by/nc/nd” Creative Commons Licence
<http://kce.fgov.be/content/about-copyrights-for-kce-publications>.



How to refer to this document?

Jonckheer P, Desomer A, Benahmed N, Vos B, Lenoir D. Nine domains of intervention to improve the multimodal management of chronic pain in Belgium. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2026. KCE Reports 414C.
<https://doi.org/10.57598/R414CS>.

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