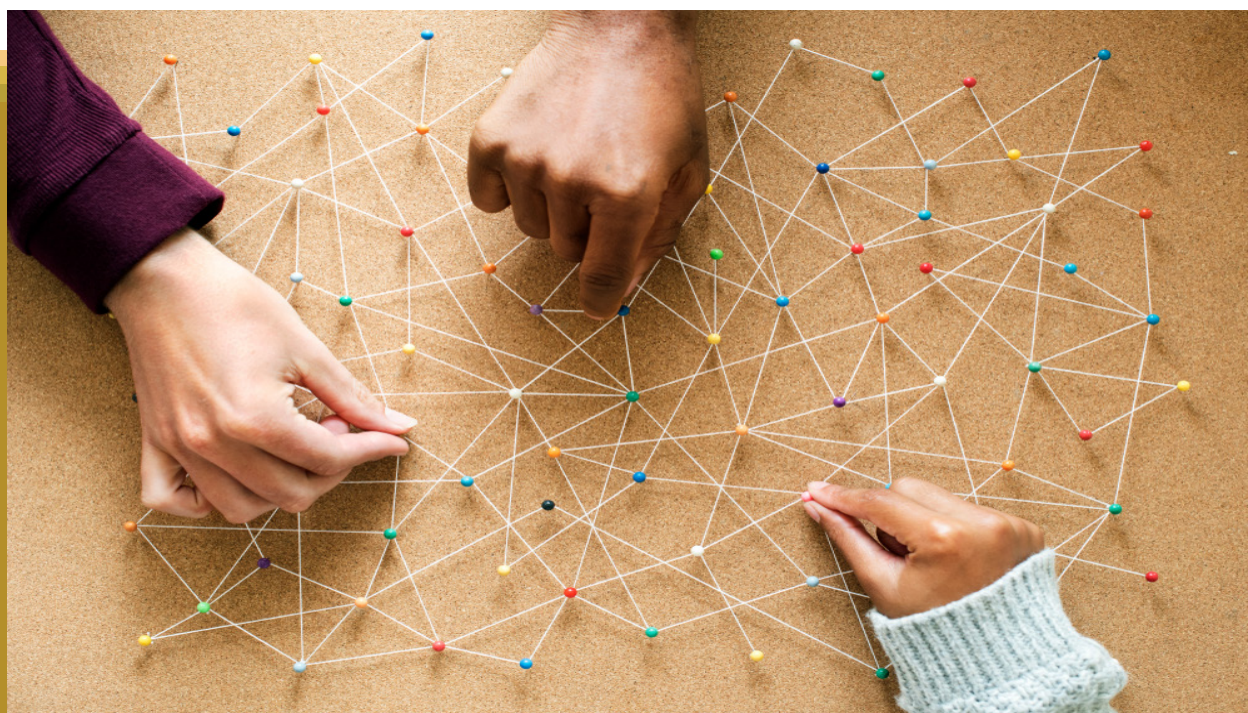


SUPPLEMENT 3: DOMAIN SHEETS

MULTIMODAL MANAGEMENT OF CHRONIC PAIN IN BELGIUM : NINE DOMAINS OF INTERVENTION



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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

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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/2026/10.273/09
ISSN: 2466-6459
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<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. Multimodal management of chronic pain in Belgium : nine domains of intervention – Supplement 3: Domain sheets. Health Services Research (HSR) Brussels: Belgian Health Care Knowledge Centre (KCE). 2026. KCE Reports 414S3. <https://doi.org/10.57598/R414S3>.

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



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1 SHEETS WITH FINDINGS FOR NINE DOMAINS OF ACTION

1.1 Patient centeredness

Improve patient-centeredness

Definition

Patient empowerment is paramount in health care and in chronic pain management. The WHO defined empowerment as “a process through which people gain greater control over decisions and actions affecting their health and should be seen as both an individual and a community process”.¹ Progressively, patient empowerment, patient participation and patient-centeredness have been used interchangeably.² In 2016, Castro et al. proposed definitions of these 3 concepts:

- Patient empowerment has an individual and a collective component:
 - Individual patient empowerment is a process that enables patients to exert more influence over their individual health by increasing their capacities to gain more control over issues they themselves define as important.
 - Collective patient empowerment is a process that gives groups the power to express their needs and take action to meet those needs and improve their quality of life.
- Patient participation has also an individual and a collective component:
 - Individual patient participation revolves around a patient's rights and opportunities to influence and engage in the decision making about his care through a dialogue attuned to his preferences, potential and a combination of his experiential and the professional's expert knowledge.
 - Collective patient participation is the contribution of patients or their representing organizations in shaping health and social care services by means of active involvement in a range of activities at the individual, organizational and policy level that combine experiential and professional knowledge.
- Patient-centeredness is a biopsychosocial approach and attitude that aims to deliver care that is respectful, individualized and empowering. It implies the individual participation of the patient and is built on a relationship of mutual trust, sensitivity, empathy and shared knowledge.

These three concepts illustrate the shift from a paternalistic to a participation-based health care concept. The differences are in the level of actions. According to Castro et al., patient empowerment and patient participation are multilevel concepts, have a political background and are situated not only on the micro level but also at the meso and macro level of the organisation. Patient-centeredness is not a multilevel concept and is situated exclusively at the micro level, focusing on the caretaker perspective.²

Patient-centeredness can be seen as a precondition for patient empowerment.² It is why patient-centeredness is the concept of interest in this section. We focus on the micro-level and the relationship between the patient and his/her health care professionals.

Background

- The literature review focusing on chronic pain highlighted the need of a patient-centred approach to optimize pain management and presented (at least) four types of actions to be taken by HCPs to support patient-centredness: deep listening and understanding of the patient; clearly explaining about chronic pain, BPS management, self-management, etc.; offering tailored interventions; establishing a therapeutic alliance based on trust. However, several challenges are also described. For example, HCPs lack certain skills (such as empathy) and organisational support (as sufficient time during consultation) to understand patients' needs or to provide adapted explanations. In the context of work, patients feel they are not understood (physicians did not understand their clients' working environment), but also experience a disrespectful attitude from the medical profession. There are also issues regarding the development of a trust relationship. For example, inconsistency between HCPs decision and patient expectations or unmet patient expectations lead to higher dropout rates in pain clinics. Furthermore, the possibility to offer tailored interventions adapted to the patients' context (including demographic and clinical characteristics, cultural factors, concerns, experience, work conditions, etc.) is hampered by many barriers such as the standardisation of patient management, or the lack of organisational resources to offer different options.

Furthermore, poor attention to vulnerable populations and their particular needs is mentioned as an important concern in the multimodal pain management.

- In Belgium, in 2024, the Survey of People Living with Chronic Conditions ([PaRIS](#)), initiated by the OECD and implemented by Sciensano delivered results about patient centeredness in ambulatory care. These results showed that patients, independent of their health status, experienced high levels of satisfaction concerning patient-centeredness. For example, across Belgium, 93.6% of patients reported that they were involved in their care decisions (either “definitely” or “to some extent”) and 82.5% reported that they discussed what is most important in managing their health and wellbeing with healthcare providers (either definitely or to some extent). Less favourable outcomes were observed regarding the presence of a care plan that takes patients' needs into account (only 28.0% of respondents reported having such a care plan) and the quality of the information received (only 42.3% of Belgian patients reported always receiving enough information to help them manage their health and well-being when they needed it).³ In Belgian hospitals, another survey (linked to the programme P4P) showed that the overall patient experience was predominantly positive, with 91.5% reporting a positive score in 2022.⁴ This applies to hospitalisation in the maternity ward, in bed types C (diagnostic and surgery) and D (diagnostic and medical treatment) or to the day hospital.⁴
 - During discussions on pain management, the Belgian patient associations mentioned several issues regarding patient-centeredness and emphasised their need for more empowerment:
 - The attitudes of both caregivers and patients are problematic. On the one hand, patients expect HCPs to provide all the answers, and on the other, HCPs believe they have all the knowledge — or at least the theoretical and scientific knowledge. Patients often report a lack of empathy from physicians. Their approach is too directive and the HCPs don't listen to the patients enough: the home situation is not questioned, nor are the children involved in the approach. This is particularly important since tension can occur between patient and significant others if there is a lack of understanding by family about pain and its impact.
 - The provided patient information/education has been deemed insufficient. For example, there is not enough information about the reasons for referral of a patient to other practitioners (e.g. not understanding why someone was sent to a psychologist).
 - The objective of pain management can differ from one patient to another. The most important outcome for patients with a BPS approach depends on each individual. This can be return to work, general well-being, improvement in quality of life (even if the improvements are small), feeling that you are heard and recognised, or the ability to exert daily activities. This is not sufficiently taken into account by the HCPs.
- Key points: There is room for improvement in Belgium regarding patient-centred care for patients presenting chronic pain.

Potential actions

The Belgian patient associations ranked the patient centeredness as a priority for improving management of chronic pain. They called for policy decisions that support patient care centred around individual needs with quality criteria imposed on healthcare professionals to encourage them to work in this direction.[Patient association]

The WOREL guidelines “Multimodal management on primary chronic pain” formulated several general recommendations which focused on the relation HCPs-patients, highlighting the needs related to patient centeredness.⁵

- Recognize the pain described by the patient and treat it according to the biopsychosocial model: treatment must be targeted at reducing the impact of biological, psychological and social factors on primary chronic pain (GPP).
- Formulate, in consultation with the patient (shared decision-making), therapeutic objectives that seem relevant and achievable (GPP).
- Discuss with the patient (shared decision-making) the most appropriate multimodal treatment (GPP).
- Encourage the patient to take responsibility for, and actively participate in, their treatment (GPP).
- Establish a collaborative and supportive relationship with the patient suffering from primary chronic pain (GPP)



- Integrate pain education into the different phases of multimodal treatment (GPP).

To increase patient-centeredness, we found seven levels of actions: supportive HCPs; clear communication; patient education (including information on the development of chronic pain and the essential differences between acute and chronic pain); encouragement of social support; tailored management, strong therapeutic alliance and; paying attention to vulnerable populations.

Supportive HCPs

- The literature review on chronic pain showed that supportive HCPs increase the patients' ability to engage in self-management. To be supportive, HCPs must have some personal manners (e.g. including positive interpersonal connection, friendliness and empathy) and skills in active listening, asking for patients' needs, preferences and values, encouraging self-management, negotiating therapeutic goals, etc. These skills request appropriate training of HCPs (See sheet **HCPs training**).
- Belgian patient associations requested an approach called 'looking more at the whole picture'. This implies for HCPs the full roll-out of the BPS model, meaning that they should not restrict to only involving a psychologist, but that they should also consider the physical aspect, evaluate the home situation, consider maintain at work, involve partners and/or children. (See sheet **Care pathway**)
- CPCs mentioned the occasional use of tools to understand the patient such as the use of evaluations where the patient himself indicates what his/her care needs are, based on 4 questions. According to the HCPs, "if it comes from the patient, the patient is more motivated".[CPC]

Communication

- In the literature, patients with chronic pain have identified a number of useful communication techniques that support their engagement with non-pharmacological approaches including clarity and direct interaction, the use of lay language, understandable metaphors, personally relevant information and visual aids such as drawings and charts, anatomical models and pamphlets. Providing instructions in simple, clear language and in multiple formats (spoken, written, pictorial, and/or recorded videos) is also proposed by the HCPs in the literature. Chapman et al. proposed eight communication behaviours that can be used as a guide in HCPs practice (See Literature review in the [scientific report](#)).
- However, regarding the effectiveness of communication techniques, the literature review concluded that further research on the required skills of a HCP for negotiating and shared decision-making regarding a BPS approach is recommended.

Patient education

- The literature review outlined that HCPs skilled in pain neuroscience education help patients to take an active role in their care and pain management, which can lead to better health outcomes during chronic pain self-management. The pain neuroscience education (PNE) is presented in the section Existing experiences below. Tools to support HCPs, such as educational videos to explain pain to patients, are considered as useful.[Literature]
- Wilson et al. mentioned that useful support for patient education is the development, pilot testing and iterative redevelopment of a package of communication materials that highlight the ways in which chronic pain affects people's lives, the costs associated with the status quo and success stories.⁶
- Belgian patient associations mentioned that patients need information on BPS management of pain in a simple and accessible language. The patient must be given more insights to enable them to adjust potential unrealistic expectations. They should also be encouraged to talk to their physician about setting (life) goals and how to work towards them (which can be seen as a part of a grieving process). They must learn to prepare for their consultation with the physician because pain management requires not only empowering people towards themselves but also towards professional healthcare providers.[Patient association]
- HCP are considered to be valuable sources for giving patient education. Patients considered that primary care professionals (notably GPs) should take the role of providers of information on BPS. Sickness funds and patient associations were also quoted.[Patient association]
- Patient associations suggested to develop a register of patients with chronic pain, so that they can receive targeted information (such as for the mammography) with a reminder that a multidisciplinary approach exists. This could be proposed by the CPC or sickness funds and patient associations. [Patient association]

Social support

- As social support (family, friends but also colleagues or employers) can help to implement, maintain or continue pain self-management and return-to-work, involvement of the significant others is important even if it is not always easy to achieve.[Literature, Patient association] Sometimes family members can provide HCPs an explanation of the patient's life experience.[Patient association] However this involvement should be adapted to each patient's situation since in certain case overly supportive family members may overprotect patients with chronic pain from physical activity and encouraging them to rest.[Literature]
- Several ways are proposed in the literature to involve significant others in pain management such as couple-focused methods (e.g. relaxation, meditation, psychoeducation, cognitive and behavioural coping skills with the partners), discussion groups between partners or information sessions on chronic pain opened to family and colleagues. These sessions (as webinar or meeting or family day) could be provided by the CPCs.[Patient association] Certain Belgian associations have already organised meetings allowing families to talk about how they are experiencing the situation. In certain cases (healing center – maisons de ressourcement), the psychologist (in collaboration with the physician) has the role of organizing meetings with families which are a part of the care pathway. However, there is still an experienced lack of financial support and patient associations suggested that the sickness funds should cover the costs of these meetings and could also reimburse psychologist support for partners (see sheet **Financing**). Patient associations also proposed that a case manager could facilitate sensibilisation of the family members, provision of information to significant others, and building a positive relationship between the care team and the patient (see sheet **Care pathway**).[Patient association]
- The support by groups of peers (pair-aidance) is recommended by patient associations since other patients are the best source to provide information on the experience of life with pain. Remote discussion groups (e.g. using Teams or social networks such as Facebook) can be considered for the exchange of experiences (especially with the participation of a nurse).[Patient association]
- Peer-support volunteers (PSVs) specifically trained in pain management are proposed to provide emotional, analytical and informational support via any mode, including face-to-face, virtual (audio or video call, messaging/emailing, or social media platform), or hybrid, and in any format, including group, one-to-one, or hybrid.[Literature]
- In the professional context, social support can be extended to colleagues, employers, professionals from the various organizations involved in the return to work process, etc. and some actions can be taken to increase their involvement in the care pathway of the patient suffering from pain (see sheet **Care pathway**). [Literature]

Tailored management

- In the literature review, the HCPs mentioned the need of standardised care for chronic pain, based on evidence and translated into guidelines. However, they also argued that pain management must be tailored to the patients' needs, preferences and values.[Literature]
- Belgian patient associations requested that the needs of each patient are listened to, and that each person's choices are accepted, without entering into a standard process with criteria or boxes to fill in. [Patient association]
- Tailored management can be applied not only to the type of treatment but also to the mode of delivery. For example, group sessions are helpful to reduce isolation and to empower patients by sharing experiences, emotions, concerns or advice but they may also impede biopsychosocial interventions, pain self-management or return to work programmes as listening to other experiences has made some patients feel worse.[Literature] Belgian pain centres propose many group activities such as psycho-educative workshops, meditation, hydrotherapy, Nordic walking... since this is also a means to save resources. Modular sessions in small groups are promoted by CPCs arguing that "it is not individual but it is individualized".[CPC] Belgian patient associations, while confirming the benefits of group sessions, advocated to keep an option of individual sessions, as pain can be a deeply personal experience and patients may not always feel comfortable speaking in front of others, depending on their characteristics, mood or life circumstances.[Patient association]
- Written communication, diaries (e.g. to document medication administration, side effects, pain-related question) or digital supports (such as online home training programmes) can be perceived as useful tools by some patients and hindering by others. For example, the use of technological innovations, such as apps, could eliminate the barriers of geographical distance and could enable personalized treatments,



while saving time and reducing costs.⁷ These apps could be used for educational purposes to manage behavioral habits and could capture real-time data for monitoring pain intensity, patient compliance, dosages of drug therapy, and outcomes.⁷ However, the literature showed that telehealth is both a potential support (e.g. well-designed interactive platforms can provide tailored information, with flexibility to fit patients' routine) and a barrier to patient engagement according to the patients' IT abilities. Organizing more extensive trainings for patients in using the online programs and offering proactive technical support are suggested.[Literature] Patient associations mentioned that currently telehealth is not often used in Belgium and several concerns are quoted such as digital difficulties (fracture numérique), electro-sensibilities and recent suppression of reimbursement for telephone consultation with GPs. They emphasised the need for more than one solution.[Patient association]

- In the work environment, a number of techniques may be employed to assist patients with chronic pain in either returning to work or maintaining their current position. For example, the following techniques may be considered: adapted work techniques or equipment, technical aids, assistive devices, the possibility of working as a supernumerary, gradually reintroducing the patient into the workplace, trying alternating duties and tasks, retraining in other jobs or reducing working hours.[Literature]

Strong therapeutic alliance

- The development of a true partnership between a patient and HCPs has to replace the paternalism in pain management. A strong therapeutic alliance with shared decision making, common goal setting, shared responsibility and guided problem solving is an important enabler of patient participation in pain management.[Literature]
- Several core elements are described to enable building a therapeutic alliance such as devoting the time to establish mutually agreed-on treatment goals; setting realistic expectations about what can and cannot be accomplished; taking into account uncontrollable factors such as patient age, etiology, and duration of the pain; availability of the physician for advice, reassurance; support during pain flares; tenacity and commitment on the part of both physician and patient; mutual respect; and a reciprocal bond generated by both parties having an emotional investment in the outcomes of treatment.⁸[Literature]
- Sometimes the change in relationship to pain was reported as an ongoing "trial and error" process where learned strategies (e.g. pacing, cognitive techniques) were tested and tried during and following the intervention.⁹ This implies the need for flexibility and negotiation abilities from both the patients and HCPs.[Literature]
- Patients with chronic back pain suggested that visiting the same professional over time could improve the continuity of the treatment and enable professionals to gain a deeper understanding of them. This mutual understanding strengthens the patient-professional partnerships and the therapeutic alliance. [Literature]

Attention to vulnerable patients

- In migrant populations, cultural concordance between patients and their HCPs has been shown to improve patient compliance and treatment response. One proposition that emerged from the literature was to provide interpreters or service providers who are culturally and linguistically competent. By doing so, the language, culture, concepts and attitudes of the population receiving care can be taken into account, which can contribute to the maintenance of long-term results.[Literature]
- As mentioned above in the social support chapter, for isolated patients, a case manager or coordinator might offer support and help the patient (for example without access to social services) to identify one trusted person to replace the absence of significant others. This coordinator could be a HCP or a social worker as long as he/she is part of the team (see also sheet **Care pathway**).[Patient association]
- The economical aspect of vulnerability was also mentioned in the literature, by patient associations and CPs. This issue is developed in the sheet **Financing**.

- **Key points:** Seven levels of actions were found to improve patient centred-care for those presenting chronic pain. For each level, a few concrete interventions were identified such as the inclusion of supportive HCPs with appropriate attitudes and skills; clear communication; patient education; encouragement of social support; tailored management regarding the content and the mode of delivery; strong therapeutic alliance which need time and continuity and; attention to vulnerable population by linguistic, cultural or coordination support.



Existing experiences

Several countries emphasised the importance of patient empowerment in their National plans (see sheet **National Action Plan**). They aimed to increase patient empowerment (Australia), improve patient-centered care (Canada) or decrease disparities (U.S). However, it is a project in itself to identify experiences of patient-centred care at a micro level. There are many potential actions to increase support from HCPs, improve communication, enhance shared decision-making, encourage appropriate social support, propose tailored management, develop a strong therapeutic alliance and pay attention to vulnerable population. Presenting experiences on a micro level is out-of-scope of this study.

One interesting and important intervention quoted by the literature review addressed the pain education. Several publications mentioned the use of Pain Neuroscience Education (PNE) and its effectiveness in addition to other components of the BPS pain management. Pain education is crucial from prevention to rehabilitation and can include anatomy and physiology concepts, differences between acute and chronic pain, triggers and flare up management, role of exercise, physiotherapy and other treatments/interventions, realistic expectations about a diagnosis and cure, fear avoidance, goal setting... PNE aims to provide patients with neurobiological understanding, biopsychosocial integration, acute vs persistent pain distinctions, evidence-based self-management, realistic expectations management and, movement and exercise integration. (https://www.physio-pedia.com/Patient_Education_in_Pain_Management?veaction=edit)

To understand the concept of pain, the model of "Explain pain" from Butler and Moseley provides an impressive number of explanations, advices, metaphors and resources both for patients, persons interested by pain and HCPs. In "Explain pain supercharged", the authors introduced the idea of curricula to all types of learners and proposed different strategies for educating patients (multisession or single session, for groups or for individual). Included concepts are for example "Pain is normal, personal and always real", "Pain and tissue damage are poorly related" or "Pain is one of many protective outputs" (see more details in the Introduction of the [scientific report](#)).¹⁰

In Belgium, the concepts developed in "Explain pain" and in PNE are supported by [Pain in Motion](#), a research group at the Vrije Universiteit Brussel and an international research consortium that focuses on pain and body movement. Researchers and clinicians have joined forces to improve the understanding of the BPS mechanisms of pain and strive to have a significant impact on healthcare for patients suffering from chronic pain. Pain in Motion proposed several tools for clinical practice (including slides for supporting HCPs explanation, leaflets, short videos, games on pain (DolorÔmeter Game) in Dutch, French and English. Many tools are also available in Spanish, Italian, Portuguese, German, Greek, Turkish... Some tools were developed and disseminated during the multidisciplinary training in primary care.¹¹

Many other sources of materials exist in Belgium. For example, the "Groupe des Infirmières Francophones Douleur" (GIFD) proposes several books in their resources section (<http://www.gifd.be/lu-pour-vous.html>). Giving an all-encompassing overview of all existing tools or resources is however feasible.

- **Key points:** There is already a multitude of actions that are being taken in Belgium, which makes it impossible to describe all of them. We will therefore focus on possible improvements or innovations, rather than trying to reinvent the wheel.

Action points proposed for Belgium

Action 1. Improve patient empowerment by ensuring patient-centred care

Action point 1.1. Encourage the patients to express their needs, values and preferences, to prepare their contacts with HCPs, to search validated and evidence-based information on pain and pain management, to discuss their situation with partners, significant others, colleagues and employers.

Action point 1.2. Encourage HCPs to have supportive attitudes and skills that improve patient-centeredness and build a strong therapeutic alliance.

This action point has several implications linked to other domains of action:



- The initial and continuing HCPs trainings should include the elements below in their objectives (see sheet HCPs training):
 - The acquisition of a supportive attitude such as empathy, active listening, reassurance, or a non-judgmental approach;
 - The development of clinical skills specific to pain and its management;
 - Learning collaborative practices with the patient to encourage self-management, negotiate therapeutic goals, provide care adapted to the patient's needs, values, and preferences, and ensure shared decision-making.
- The implementation of the WOREL guidelines "Multimodal management on primary chronic pain" in primary care should be supported with special attention for the recommendations focusing on the relation between HCPs and patients;
- Sufficient resources (see sheets **Care pathway** and **Financing**) should be provided in the care pathway in such a way that:
 - Health (and social) professionals can devote sufficient consultation time to patients with subacute or chronic pain (to listen, explain, negotiate, etc.);
 - Various communication formats (on pain neuroscience education, self-management, and a multimodal approach) are available to patients;
 - Different pain management options are available to tailor the care pathway to the patient's needs, values, and preferences. This adaptation concerns both the content of treatment and the delivery method for certain care (e.g. individual or group sessions);
 - Contact with a same healthcare professional can be repeated and sustained over time to facilitate a relationship of trust and continuity of care.

Action point 1.3. Encourage HCPs organisations, sickness funds and patient associations to support pain neuroscience education conducted by HCPs by providing appropriate information directly to patients. As there are already many evidence-based materials on this topic, a more active dissemination rather than a development of new content is suggested.

Action point 1.4. Promote social support in the care pathway:

- By involving significant others in pain management activities with the patient's agreement (e.g. by suggesting to the patient to invite a relative to accompany him to a therapeutic session);
- By inviting the significant others to share their narrative about living with someone presenting chronic pain (for example, during the therapeutic session together with the patient);
- By offering psychological support to significant others if needed (with reimbursement by sickness funds);
- By encouraging support by groups of peers;
- By supporting patients who are willing to act as a volunteer expert to help their peers;
- By involving colleagues and employers to provide them with information on education in the neuroscience of pain and the different ways of managing pain, and to discuss the work adaptations that are needed so that the patient can continue or return to work and navigate legal procedures.

Action point 1.5. Provide specific support to vulnerable populations in the care pathway:

- By adapting information to other languages and cultures and/or providing the services of an interpreter or cultural mediator if necessary;
- By strengthening the care coordination for patients who are isolated or have poor coping skills (see sheet **Care pathway**);
- By taking into account the potential financial difficulties of patients with lower socio-economic status (see sheet **Financing**).

Action point 1.6. Encourage research on implementation of effective communication strategies (including a reflection about the term "psycho" included in the term biopsychosocial which is so uninviting for both patients and HCPs).



Stakeholder feedback

Action point 1.1. Encourage the patients to express their needs, values and preferences, to prepare their contacts with HCPs, to search validated and evidence-based information on pain and pain management, to discuss their situation with partners, significant others, colleagues and employers.

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the first action point (n=3/67) or its feasibility (n=7/67), or declined to comment on its feasibility (n=1/67). Major comments provided by the stakeholders (SH) are the following:

- It would be helpful if patients communicated their needs, values and preferences in a timely manner, so that the consultation can address the topic that is most important to them at that moment.
 - However, patients' needs can change over time and some patients struggle to identify their needs, either because they are going through a confusing emotional situation, or because they lack the words to express them, or because they have not been educated to listen to and recognize their own needs.
 - A structured tool would be helpful to communicate needs and prepare for discussions. There are validated needs expression and assessment tools that can be used to contribute to this process (e.g. ELADEB "Echelles Lausannoises d'Auto-évaluation des Difficultés et des Besoins").¹²
- Asking patients to search for validated information is a major concern for many stakeholders who emphasize that too much responsibility should not be placed on patients.
 - ***There is a vast amount of information available (including inaccurate information) on internet, social media... and it is very difficult for the patients to find validated information themselves.***
 - ***Some patients do not have enough energy and/or competencies to search and understand information on pain. Some patients are exhausted due to their chronic pain; the level of health and digital literacy of patients can be low; or the cognitive capacity can be limited. This can lead to inequalities in care (see Action point 1.6).***
 - ***There are also certain cultural and religious barriers that increase misbeliefs regarding pain and pain management (see Action point 1.6.).***
- It is the role of HCPs to provide each patient with current, validated information in an adapted language. This must be a part of the management process.
 - This requires that HCPs themselves have access to up-to-date evidence-based information and be able to consult it in a highly efficient and cost-effective manner.
 - In practice, several (intensive) therapeutic sessions are sometimes needed before information is understood by patients and before they discover their own values and define realistic expectations. This implies that HCPs and patients have sufficient resources to be able to invest in a trusting relationship i.e. putting the patient at ease, reviewing notes beforehand so they don't feel like a number, allowing sufficient time for questions, proactively explaining medical issues, and providing reliable information (see Action point 1.2.).
- Patient associations should also take on the mission to provide validated understandable information (see action point 1.3).
- Several tools are proposed to support patient information such as digital tools, group sessions and the creation of a certified website developed by HCPs (such as 'Infosanté').
 - It would be necessary to allocate resources to develop/update/complete the website site and to promote it among the general population and among HCPs.
 - In the event of difficulties in accessing digital technology, the help of a social worker could also facilitate the orientation and support of patients.
- Some patients can feel unsupported by their partners, significant others, colleagues and employer. Bringing visibility to this otherwise imperceptible problem may lead to social consequences such as stigmatization and rejection, or, alternatively, excessive solicitous behavior—both of which can be detrimental to the patient's well-being. (see also Action point 1.4).



Action point 1.2. Encourage HCPs to have supportive attitudes and skills that improve patient-centeredness and build a strong therapeutic alliance.

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the second action point (n=2/64) or its feasibility (n=6/64), or declined to comment on its feasibility (n=3/64).

- The stakeholders emphasize that the quality of the relationship with the HCP largely determines the effectiveness of care, particularly in the area of chronic pain. Being listened to, recognized, and understood allows the patient to better express their needs and actively engage in their care. Conversely, the feeling of not being heard leads to demotivation, loss of confidence, and sometimes abandonment of care. "Patients often don't need a miraculous treatment immediately, but rather the feeling that their complaints are real, exist, are allowed to be there, and their impact on their lives is validated."
- The need of initial and continuing HCPs trainings is confirmed. Training in active listening, therapeutic education and motivational interviewing are quoted as enablers for shared decision-making. There is a doubt on the feasibility of adding more topics to the current (quite full) cursus programme (see Training). At the same time, some stakeholders mentioned that these types of training already exist. Lifelong learning is promoted to repeat the HCPs learning process and to strengthen their knowledge about pain and chronic diseases. However, this requires time and free access or financial support for HCPs. There is also a risk of HCP saturation due to the large number of topics they must learn. The role of patient experts as HCPs trainers is highlighted by some stakeholders who mentioned existing Belgian initiatives (see sheet HCPs training). "A physician is an expert in their field, a patient in their own life." In clinical practice, it is also suggested to consider working with chronic pain specialists in each care department (e.g., appoint a nurse per department who receives further training in addressing chronic pain issues and translates this knowledge to the care team/department in which she works). The question of a professional title for pain specialists (based on training and professional qualification) is raised.
- The WOREL guidelines 'Multimodal management on primary chronic pain' in primary care' appears not to be known by some respondents who preferred then not to accept the proposition. Other stakeholders confirmed the need of guidelines but some of them evoked some concerns such as the challenge to integrate an additional thematic guideline to other existing guidelines that are needed in the care for patients with multimorbidity. There is also the fear that the guidelines will be limiting, leading to a risk of sanctions if not followed. Finally, success in implementation of guidelines depends of many factors and requires effort.
- Investing in the therapeutic alliance is considered very important by the stakeholders but it takes time and energy, which is not always easy given the high workload and HCPs shortage. More patients need to be treated, and the administrative side also needs to be kept in order (invoices, consultation letters, certificates, reports, etc.).
- Financing of HCPs should include a better balance between the financing of intellectual services and technical acts to allow the dedication of more time in consultation for example (see sheet Financing). In this context, a critical review of the current services offered in CPCs is suggested, as well as clear quality criteria linked to funding, so that non-evidence-based care is no longer structurally supported.
- Regarding communication with patients, the stakeholders confirmed the need for tools and the potential role of patient associations (see Action point 1.3)

Action point 1.3. Encourage HCPs organisations, sickness funds and patient associations to support pain neuroscience education conducted by HCPs by providing appropriate information directly to patients. As there are already many evidence-based materials on this topic, a more active dissemination rather than a development of new content is suggested.

Acceptability of this action point is very high while feasibility raises some questions. Few respondents expressed doubts about the acceptability of the third action point (n=3/64) or its feasibility (n=9/64), or declined to comment on its acceptability (n=3/64) or feasibility (n=6/64).

- Some stakeholders emphasised providing information should be the role of HCPs as mentioned above but that doesn't mean that they must take it on alone. They mentioned that multiplying the points of access to coherent and validated information could increase the chances of bringing about change in patients' beliefs and attitudes. However, it is reminded that without a therapist explaining it to the patient first, the educational tools are ineffective.

- The stakeholders confirmed that sickness funds, patient associations, and professional organizations already have effective communication channels to relay evidence-based information and that this requires, above all, coordination and a shared desire to work together. However, financial resources are requested by the patient associations for their work of disseminating information.
- It is essential that this content is popularized, adapted to everyday language, and accessible to all, including individuals with low literacy (see action point 1.5.) It will also be important to diversify the media (print, digital, group session, workshops, videos) to avoid excluding certain patients, particularly those who experience difficulties with digital technology. HCPs asked for the integration of information in the electronic medical dossier.
- The need for a "supervisory body" to ensure coherency and validation of information content is suggested. This supervisory body should have sufficient resources to collect and share updated evidence-based information to the sickness funds, patient associations, and professional organizations. It could also decrease possible bias or excesses (e.g. patient associations lobbying to have more clients or sickness funds promoting additional services/insurances) Chronic pain centres could also have a role in monitoring new publications in pain education (see sheet Multistakeholder group).
- In conclusion, this action point requires efforts from decision makers in terms of resource allocation and will take several years.

Action point 1.4. Promote social support in the care pathway:

Acceptability of this action point is very high but feasibility raises some questions. Only one respondent expressed doubts about the acceptability of the fourth action point whereas more considered that this action is fairly not feasible (n=11/64), or declined to comment on its acceptability (n=2/64) or feasibility (n=2/64).

Social support is considered as of high importance in pain management. However, several concerns are mentioned by the stakeholders:

- Some patients are in severe isolation and don't have access to significant others for support. Resources are needed to resolve this societal issue and greater recognition and appreciation of voluntary work is needed. In Belgium, 40,000 volunteers are active in caregiving (not family members and at least 4 hours/week), compared to 900,000 in the Netherlands. Belgium lags behind compared to other European countries. It is suggested to working in the patient's care local environment, with the active involvement of non-caregivers ('non soignants'). In this context, better understanding of the role of certain organisations such as 'l'Agence pour une Vie de Qualité (AVIQ)' and increased dissemination of their services to patients would be useful. Many people are still unaware of this organization's existence or do not sufficiently utilize the assistance and services it offers. Making it more visible and accessible would help optimize the social support available.
- Involvement in activities by significant others can be challenging, mainly if pain is already a subject of discord. Relatives cannot always see the benefit of it and may not be able to get time off work or dedicate extra time to this. Some patients also prefer not to involve their family. There may be underlying serious issues within the patient's family, such as patient stigmatization or the partner or parent being too present/manipulative, preventing the patient from having any space. Therefore, it's important to always thoroughly obtain the consent of the patients involved before reaching out to significant others. It is advised to continuously check whether the patient is still comfortable with this, only communicate with their partner in the patient's presence, and clearly communicate to the patient's partner about the confidentiality of professional confidentiality.
- There are issues to offer psychological support such as the difficulty in finding psychologists trained in chronic pain. The shortage of "conventioned" psychologists leads to long waiting times or increases in costs for patients if they consult non conventioned professionals. Although psychological support for significant others can be very important, it can be suggested that the provision of such support to chronic pain patients is generally of higher acuteness/priority than to the significant others. In the current context, characterized by a lack of conventioned psychologists, psychological support for significant others could be given by the general practitioner instead of by psychologists. However, it is important to notice that physicians are already overburdened and that finding an effective solution for this high need of affordable psychological support is likely to involve greater complexity.
- Belgium has already introduced support systems with peers (via patient associations) or patients-experts (e.g. Patient Expert Center). Such peers and experts must receive excellent training to achieve this and should be supervised. However, accessible (and free) high-quality educational programs are often hard to find. Furthermore, integrating a new job/position as a peer support professional is also a challenge



(volunteers often dedicate a great deal of their time and energy to the day-to-day running of an association, but without a fixed financial compensation or appreciation this is difficult). This means there are always challenges in finding enough volunteers, especially in the current difficult economic times.

- Involving colleagues and the employer isn't always possible (due to the time and energy needed) or even desirable. HCPs have little contact with the work environment of the patient. Patients with disabilities are often stigmatized and, due to the current organization of the regular workforce, lack opportunities to find/continue paid work with their condition/illness. Social legislation is very complex, and even not known by employers. The role of occupational medicine is highlighted by the stakeholders (as well as medical advisors from sickness funds and insurance physicians). To increase awareness of reasonable work adaptations and an active fight against discrimination, a collaboration between the healthcare system, social partners, and employment policies are necessary.
- More broadly, it would be desirable to encourage a change in society's view of invisible pathologies and chronic illnesses. This change cannot rest solely on the patient: in a fragile situation, they have neither the responsibility nor the means to be the sole vector of this cultural and social transformation (see sheet Public awareness).

Action point 1.5. Provide specific support to vulnerable populations in the care pathway

Acceptability of this action point is very high but feasibility raises many questions. Only two respondents (n=2/64) expressed doubts about the acceptability of the fifth action point, whereas more expressed doubts about its feasibility (n=12/64), or declined to comment on its feasibility (n=3/64).

- This action point appears to be essential, notably to strengthen therapeutic alliance. This corresponds to the principles of equity and a patient-centered health system. This action point addresses people who are seriously ill, who live alone at home, who have cognitive impairment, who experience language, cultural or religious barriers... This also should address deaf and hard of hearing community.
- It is also emphasized that to be considered as "understandable", a message must not only be translated in the appropriate language; but it also involves taking other beliefs into account (e.g., through intersectional thinking) and this is challenging. For example, one stakeholder mentioned that there's a subpopulation of highly educated Dutch-speaking residents in Brussels with many social contacts and financial comfort who, despite all these advantages, can be considered as vulnerable. Since these people are very skeptical about everything "imposed" on them by the government and the medical world, they need adapted messages.
- The detection of vulnerable situations, without stigmatizing people, remains a significant challenge. It is imperative that healthcare services provide accessible assistance and support without imposing interventions, thereby ensuring respect for patient autonomy and dignity.
- Some stakeholders mention there are already tools (e.g. cultural interviews) and resources such as interpreters, physicians who speak sign language, places adapted for people with disabilities, financing support, etc. that can be used to support vulnerable populations. However, they noticed that these tools are underused or not yet well-known. They ask for more coordination and information dissemination on the existence of these supports.
- Other stakeholders require additional resources and, in some cases, contend that available resources may never be sufficient to address all specific needs comprehensively. Several issues are evoked such as:
 - Interpreters and cultural mediators are saturated. Many of them are employed in administrative tasks, police work, etc., but aren't used to translating medical information and emotional issues (literally), nor are they used to processing the impact of the answers. For example: have an interpreter explain that you (or your child) are on palliative care.
 - Collaboration with social workers from social services (Centre Public d'Action Sociale (CPAS) - Openbaar Centrum voor Maatschappelijk Welzijn (OCMW)) or sickness funds etc. appears to be complicated as they are already overwhelmed by the amount of work. Furthermore, HCPs themselves do not always have the time for organising the collaboration with social workers, specifically if HCP is an independent liberal professional.
 - Working with a care coordinator could be positive but this requires transmural collaboration to reach the living space and reality of each patient.

- The group of vulnerable patients is so heterogenous that too many different tools are needed. This requires an important involvement of policy decision makers. But in practice, the current political and budgetary context in Belgium raises serious doubts. Cost-cutting policies in the health and social sectors are already weakening existing services and generating anxiety among patients, particularly among the most disadvantaged. There is therefore doubt about the sustainability of what is in place today, and even more so about the possibility of developing new systems in the short or medium term.
- Finally, the stakeholders suggested that perhaps the first action to be proposed would be to list all the initiatives that have already been taken in that direction and measure their effect.

Action point 1.6. Encourage research on implementation of effective communication strategies (including a reflection about the word “psycho” from the term biopsychosocial which is so uninviting for both patients and HCPs).

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the sixth action point (n=5/64) or its feasibility (n=7/64), or declined to comment on its acceptability (n=5/64) or feasibility (n=9/64).

- The concept of « effective communication strategies” is not known by all.
- Research requires financing.
- Universities and other scientific professional organisations (such as the Société Scientifique de Médecine Générale (SSMG)) should be encouraged to perform this action point.
- Two opposing opinions emerge from the comments concerning the word “psycho” and the opportunity to change it:
 - Arguments “pro” are related to the perception by patients of stigmatisation when the word psycho is used. The stakeholders confirmed the patients feeling that some professionals doubt the reality of their pain or think that it is “in their head”. This misunderstanding creates mistrust and weakens the relationship of trust. In this context, working on more appropriate communication strategies, which fully recognize the reality of pain, could improve adherence to care and the patient experience. There is a distinction to be made between a normal psychology in an abnormal situation versus an abnormal psychology in a normal situation. The latter often provokes resistance, leading to “psychopathologization”. A health psychology perspective (emphasizing the role of normal psychological processes in an abnormal situation) should be more prominent in psychology programs. Currently, there is still too much emphasis on the psychopathological perspective (the role of abnormal psychological processes). Furthermore, reducing the biopsychosocial model to the psychosocial dimension is a mistake. The body is one and even more so in the area of chronic pain. Healthcare professionals often forget to explain the biological aspect and the continuous advances in understanding the mechanisms of chronic pain.
 - Arguments “against” any change are that biopsychosocial is an international concept and because psychological factors are crucial in chronic pain, they have to be explicitly named. It is a way to acknowledge their importance. It is also useful to convince psychologists they have a role to play in the pain management. Furthermore, it is probable that the discomfort felt with the ‘psycho’ part of the BPS approach will not be solved just by removing a word. Above all, it is necessary to promote coherent communication, which shows the unity of the field of health in its biomedical, psychological and social dimensions. It is by strengthening this coherence, without stigmatizing or compartmentalizing, that HCPs can truly encourage patient support and recognition of the roles of each.

Amended action points

Action point 1.1. Encourage the patients to express their needs, values and preferences, to prepare their contacts with HCPs, to ~~search~~ **take into account** validated and evidence-based information on pain and pain management, to discuss their situation with partners, significant others, colleagues and employers.

- **HCPs and patient associations should take up the task to provide understandable and accessible evidence-based information which means that themselves must have access to up-to-date evidence-based information.**
- **As some patients struggle to identify their needs, the implementation of a structured tool in clinical practice (e.g. ELADEB) would be useful to help them and prepare for discussions.**



Action point 1.2. Encourage HCPs to have supportive attitudes and skills that improve patient-centeredness and build a strong therapeutic alliance.

This action point has several implications linked to other domains of action:

- The initial and continued training of HCPs should include the elements below in their objectives (see sheet HCPs training):
 - The acquisition of a supportive attitude such as empathy, active listening, reassurance, or a non-judgmental approach;
 - The development of clinical skills specific to pain and its management;
 - Learning collaborative practices with the patient to encourage self-management, negotiate therapeutic goals, provide care adapted to the patient's needs, values, and preferences, and ensure shared decision-making.
- The implementation of the WOREL guidelines "Multimodal management on primary chronic pain" in primary care should be supported and specifically the recommendations focusing on the relation between HCPs and patients
- Sufficient resources (see sheets Care pathway and Financing) should be provided in the care pathway in such a way that:
 - Health (and social) professionals can devote sufficient consultation time to patients with ~~subacute or chronic~~ pain (to listen, explain, negotiate, etc.);
 - Various communication formats (on pain neuroscience education, self-management, and a multimodal approach) are available to patients;
 - Different pain management options are available to tailor the care pathway to the patient's needs, values, and preferences. This adaptation concerns both the content of treatment and the delivery method for certain care (e.g. individual or group sessions);
 - Contact with a same healthcare professional can be repeated and sustained over time to facilitate a relationship of trust and continuity of care.

Action point 1.3. Encourage HCPs organisations, sickness funds and patient associations to support pain neuroscience education conducted by HCPs by providing appropriate information directly to patients. As there are already many evidence-based materials on this topic, a more active dissemination rather than a development of new content is suggested.

Action point 1.4. Promote social support in the care pathway:

- By involving significant others in pain management activities with the patient's agreement (e.g. by suggesting to the patient to invite a relative to accompany him to a therapeutic session);
- By inviting the significant others to share their narrative about living with someone with chronic pain (for example, during the therapeutic session together with the patient);
- By offering psychological support to significant others if needed (~~with reimbursement by sickness funds~~);
- By encouraging support by groups of peers ; ~~these peers should receive training, support and supervision to ensure adequate support of chronic pain patients.~~
- By supporting patients who are willing to act as volunteer experts to help their peers; ~~these volunteers should receive training, support and supervision to ensure adequate support of chronic pain patients.~~
- By involving colleagues and employers to provide them with information on education in the neuroscience of pain and the different ways of managing pain, and to discuss the needed work adaptations so that the patient can continue or return to work and navigate legal procedures.
 - ~~To improve the integration of chronic pain patients in the work environment, a better collaboration should be established between the healthcare system, social partners, and employment policies.~~
 - ~~A general change in society's view of invisible pathologies and chronic illnesses should be obtained to facilitate the reintegration of chronic pain patients.~~

Action point 1.5. Provide specific support to vulnerable populations in the care pathway:

- By ensuring that reliable information is provided in an understandable language. This “understandable language” encompasses more than just the language itself but also requires consideration of beliefs or the (sociocultural) context of the patient.
- By adapting information to other languages and cultures and/or providing the services of an interpreter or cultural mediator if necessary; It is important to realise that translating health-related information can be difficult or sensitive and requires specific skills from a translator.
- By first focusing on increasing the visibility and implementation of existing tools (e.g. cultural interviews) and resources such as interpreters, physicians who speak sign language, places adapted for people with disabilities, financing support, etc. before developing new ones;
- By strengthening the care coordination for patients who are isolated or have poor coping skills (see Care pathway);
- By taking into account the potential financial difficulties of patients with lower socio-economic status (see Financing)status (see Financing).
- By always putting respect for the individual first and consequently offering help rather than imposing it;
- By being aware that the vulnerable population is a highly heterogeneous group with diverse needs. Mapping this heterogeneity, related needs, and the effectiveness of existing approaches can be an interesting first step towards making progress.

Action point 1.6. Encourage research on implementation of effective communication strategies (including a reflection about the term “psycho” included in the term biopsychosocial which is so uninviting for both patients and HCPs).

Objectives of the action points

- To increase the patients’ empowerment and improve self-management.
- To improve patients-HCPs communication and build a strong therapeutic alliance.
- To enhance patient neuroscience education
- To encourage social support
- To promote individualised pain management, taken into account particular needs and vulnerabilities.

Target stakeholders

- Patient associations
- HCPs associations / Hospitals
- Sickness funds (communication department)
- Work sector: Employers, occupational physicians, medical advisors from sickness funds
- Research sector

Points of attention or required conditions

- Patients need help to find validated information among the vast amount of information available on internet, social media.
- Several trainings have already been developed and should be promoted to HCP’s.(see Training)
- The WOREL guidelines “Multimodal management on primary chronic pain” in primary care covers not all pain situations. Other guidelines are required. Involvement of HCPs in the guidelines development is paramount, immersing them in the evidence rigour and listening to them on feasibility, barriers and facilitators for the implementation.
- Special attention should be paid to the context of multimorbidity where multiple different guidelines apply to one patient.
- Special attention should also be paid to patient empowerment in minority groups as pain perception and communication regarding pain may vary.



- The financing of the healthcare system is currently not perfectly aligned with the needs surrounding PNE. Initiating a brainstorming exercise on this topic would be a useful first step in the evolution towards better management of patients with chronic pain.(see Finance)
- Multiplying the points of access to coherent and validated information could increase the chances of bringing about change in patients' beliefs and attitudes but without a therapist explaining it to the patient first, the educational tools are ineffective.
- Accessibility and comprehensibility of information must be assessed. The development of a supervisory body could help to ensure and monitor the accuracy and completeness of the provided information.
- It would be useful to add information on PNE in the electronic medical record of the patient.
- The limited availability of psychological support that is offered by conventioned psychologists does not allow to offer a such support to all significant others.
- It is not possible to propose a unique all-encompassing approach for centeredness of care in chronic pain management due to the heterogeneity of the population and the evolution of needs over time. Several examples were found:
 - Offer group session but also individual encounter with HCPs
 - Adapt the proposition of telehealth to the preference and information technology abilities of the patients
- Recovered patients have different insights that current patients and can be powerful advocates, excellent mentors and potential coaches. In a group of peers, they can encourage a 'mutual recovery' approach and push the group towards learning objectives and mutual skills development.
- Involving colleagues and the employer isn't always possible (due to the time and energy needed) or even desirable. HCPs have little contact with the work environment of the patient. Patients with disabilities are often stigmatized and, due to the current organization of the regular workforce, lack opportunities to find/continue paid work with their condition/illness. Social legislation is very complex, and even not known by employers.
- The detection of vulnerable situations, without stigmatizing people, remains a significant challenge. It is imperative that healthcare services provide accessible assistance and support without imposing interventions, thereby ensuring respect for patient autonomy and dignity.
- Among vulnerability sources, it is important not to neglect clinical comorbidities (e.g. organ failure) because these can have an impact on treatment complexity, possible level of physical activities, access to transport...
- The call for research is inextricably linked to a call for funding for such research.
- The debate over the term "psycho" in the biopsychosocial model reveals two opposing views among the stakeholders: one side argues that the term stigmatizes patients and undermines trust, advocating for communication strategies that validate pain and emphasize normal psychological responses to abnormal situations (and not abnormal psychological responses to normal situations). The other side maintains that "psycho" is essential to highlight the role of psychological factors in chronic pain and promote interdisciplinary coherence, suggesting that removing the term alone won't resolve discomfort or improve care.

1.2 Care pathway

Define a care pathway

Definition

According to the European Pathway Association (E-P-A), a care pathway is a “complex intervention for the mutual decision making and organization of care processes for a well-defined group of patients during a well-defined period”.

Defining characteristics of care pathways includes¹³:

1. An explicit statement of the goals and key elements of care based on evidence, best practice, and patients' expectations and their characteristics
2. The facilitation of the communication among the team members and with patients and families;
3. The coordination of the care process by coordinating the roles and sequencing the activities of the multidisciplinary care team, patients and their relatives;
4. The documentation, monitoring, and evaluation of variances and outcomes; and
5. The identification of the appropriate resources.

Background

- Pain management is far from optimal in Belgium as in many other countries as it is emphasised by all the sources consulted for this study.
- The literature review showed that care organisation does not always support an optimal management of pain: long waiting times, short duration of consultation, poor access to evidence-based psychotherapy, difficulty to navigate in health system are barriers quoted by patients while HCPs mentioned time pressure, administrative workload, lack of guidance and supportive tools.
- In Belgium, patient associations and HCPs from Chronic Pain Centres (CPC) reported that patients suffering from chronic pain wander between different healthcare professionals and levels of care. They emphasised that while the concept of multidisciplinary management enters progressively in common knowledge, multimodal and even biopsychosocial (BPS) approach of pain is often not known by the patients. They confirmed also many barriers to the BPS approach as identified in the literature. For example, the negative a priori regarding the psychological management or the fact that patients want their bodies to be relieved and prefer rapid and passive interventions (see the Section Belgian situation in the [scientific report](#)). We summarize here the gaps in the current management of pain as mentioned by the patient associations [Patient association] and the HCPs from the CPC.[CPC]

A too-late entry in the multimodal approach:

- Pain (e.g. migraine).is sometimes minimised by the patients themselves who do not ask care.[Patient association]
- Pain is not considered as an entity in itself. It is invisible and cannot be objectified by blood tests or X-rays, which destabilises HCPs.[Patient association]
- General practitioners (GPs) have generally not sufficient time during consultation to deeply listen to the patients' concerns or expectation.[Patient Association & CPC]
- There is a lack of action before the transition to chronicity.[CPC]
- Sometimes GPs refer to specialists (e.g. rheumatologists) and rely on their analysis without reconsidering the diagnosis. In other cases, GPs do not make enough referrals to specialist physicians.[Patient association]
- GPs and specialists from the first and second line do not often use BPS approach. They focus mainly on medications and offer psychological support often lately in the pain management, after many other treatments, when they don't know what to do anymore.[Patient Association & CPC]
- HCPs do not educate patients on the BPS model. Sometimes, they prescribe BPS interventions such as physiotherapy, hydrotherapy and psychological support but patients do not understand their purpose and do not follow the prescription.[Patient association]

A multimodal approach difficult to be organised in primary care

- There is a lack of HCPs specialised in pain. Physiotherapists oriented BPS are still lacking even if there is progress.[CPC] In some areas, there is a severe shortage of psychologists and psychiatrists,



to the extent that they do not accept any new patients (e.g. in the province of Luxembourg).[Patient association] Waiting times can be very long. Few psychologists seem to have interest in pain.[CPC] There are also different approaches within psychology and it is difficult for the patients to find its way in it.[Patient association] The authors of the Belgian guideline on the management of chronic pain confirmed the need to decrease long waiting times in psychological approach in primary care.⁵

- There are financial barriers for patients to follow physiotherapy and/or psychological treatment due to limited reimbursement (higher issue with “non conventioned” therapists) and limited number of reimbursed sessions (see sheet Financing).[Patient Association & CPC]
- The weakest point of BPS model is the social aspect. Social workers could play an important role in helping patients to manage health determinants, but their role is very much devalued. In addition, the administrative workload of the social workers is enormous (e.g. at the MS League, there are 100 beneficiaries per social worker and their schedule only allows them to see two patients per week; there are no multidisciplinary meetings and there is no contact with GPs or nurses; everyone works in isolation).[Patient association]

Limited access to the CPCs

- Patients do not know the missions and even the existence of the chronic pain centres.[Patient association] The CPCs confirmed that they do not actively inform the local population about what they do, for fear of advertising and of not being able to accommodate all the patients.[CPC]
- Some patients believe that CPCs are strongly specialised, focusing on specific diseases such as endometriosis.[Patient association]
- GPs and specialists from the first and second line appear to not refer to the CPCs. Some patients evoked that a compulsory visit to a physical physician or neurosurgeon is needed.[Patient association]
- Waiting time in CPCs is often long (at least 6 months and sometimes more than one year).[Patient Association & CPC]
- Patients arrive in CPC after many months of pain. Because they have so long pain, they ask rapid relief, are consumers of resources and have little chance of reintegration into the labour market.[CPC]
- The demand is too high for the 35 funded pain centres (see chapter 4. Current care offer in Belgium in the [scientific report](#)). For example one CPC mentioned receiving 40 new demands/month while it is possible to care ten new/month.[CPC]
- A patient selection is performed by certain CPCs such as only patients referred by specialists from the hospital where the centre is located, or from a network of HCPs.[CPC]
- The process for acceptation of new patients can be complex and long (several weeks or even many months): application form filled by the patient, first assessment based on the form, info session with patient and significant others, clinical assessment by several specialised physicians and HCPs, multidisciplinary discussion... [Patient Association & CPC]

Several issues in the organisation of the CPCs

- The CPCs emphasised an important financial issue that hampers the implementation of a BPS approach in their practice (see sheet Financing).[CPC]
- In some non-funded CPCs, the team is not large enough in terms of workers numbers and/or full-time equivalents, and not multi-skilled enough in terms of expertise (e.g. only one professional for certain disciplines). As soon as one professional is absent, the whole chain stops (e.g. if the psychologist trained in pain education is absent, there is no replacement).[CPC]
- The duration of the first consultation might be long (around one hour) which it is not always possible given the HCP workload or the CPC organisation.[CPC]
- The pain assessment is felt as inadequate or insufficient by the patients. For example, they evoked the use of only one pain scale while they have more than one location of pain.[Patient association]
- Patients found that explanations on the care BPS programme, the content of physiotherapy sessions or more invasive treatment are missing. Significant others are not sufficiently informed and involved (See Patient centeredness).[Patient association] The CPCs observed an increasing proportion of therapy-resistant patients (who ignored treatments or did not want or cancel consultations but not technical procedures).[CPC]

- Patients feel that the CPCs follow a protocol without possible deviations. Sometimes the management is taken by one specialist from one discipline (e.g. anaesthetist) and the holistic vision (link between body and mind) is lacking.[Patient association]
- According to the patient associations, initial conclusions are rarely questioned by the other HCPs. Sometimes, every symptom is related to one diagnosis without searching further.[Patient association]
- There is a lack of coordination within the CPC between physiotherapists, occupational therapists, physicians specialised in physical medicine, etc. (more detailed in the sheet Interprofessional collaboration) .[Patient Association & CPC] There is no well-designated HCP to turn to if there are any concerns.[Patient association]
- Patient associations mentioned that the care advices offered by the CPCs are not always feasible in practice.[Patient association] For example, the CPC is sometimes far from the patient home and there are no help for travelling.[Patient Association & CPC] The CPC mentioned a geographically uneven distribution across Flanders (Antwerp 7, East Flanders 7, West Flanders 4, Limburg 2, Flemish Brabant 1).
- Hospital beds dedicated to pain are not available in all centres. This can be useful for certain patients on opiates to go through withdrawal. These patients must be sent elsewhere in this case.[CPC]
- The CPCs themselves mentioned that evaluation of the centres is currently insufficient and does not support improvement in the implementation of the BPS approach.[CPC]

Arduous discharge from the CPCs

- Some CPCs go round and round with the same patients during several years (i.e. patients stuck in a loop). Some physicians in physical medicine prefer to wait until they are certain that their patients' behaviour has changed.[CPC]
- The multidisciplinary management of pain is difficult to organise in every GP practice. The referral to 1st line by the CPC is limited by lack of network.[CPC]
- Referrals to GPs don't always go well because of misconception of BPS management and excessive workload. The same goes for physiotherapists, who don't always follow prescriptions (and don't always want to get patients moving or even tell them not to do certain movements). However, things are changing (less opiates, for example).[CPC]
- At the discharge from CPC, referral to psychologist in the primary care is particularly difficult (waiting time 3 or 4 months, limited reimbursement).[Patient association]
- There is a lack of information on the return to work and rights of patients suffering from chronic pain, whether from CPCs or sickness funds companies.[Patient association]
- Patients are left feeling exhausted by the sheer volume of bureaucracy they have to deal with. [Patient association]

Problematic maintain and/or return to work

- Many HCPs are not expert in disability and occupational health. The CPCs observed that RTW is often advised too late or not at all.[CPC] Patient associations mentioned that medical doctors often prescribe rest instead of work at partial-time or progressive employment ('progressieve tewerkstelling'). Patients themselves are afraid to face colleagues if they cannot assume completely their job.[Patient association]
- When adaptation is needed, it is difficult to find work arrangements in terms of timetables (limited working time and/or work at the right times) but also in terms of equipment. Not all jobs are adaptable. Teleworking is not the solution for all.[Patient association] Employers are not encouraged to make efforts to accept adapted or part-time reintegration.[CPC]
- According to the patient associations, medical advisors from sickness funds do not sufficiently listen to patients and do not know social legislation (e.g. wanting to break a permanent contract without realising that this does not entitle to unemployment benefits). They don't want patients to work below their level of competence. They make decisions in 10 minutes without explaining the pro and con's, with dramatic consequences. It is often black or white (able to work or not). Encounter with the medical advisor is stressful instead of supportive to return to work. This can lead some patients to refrain from seeking support from sickness funds.[Patient association] The CPC confirmed that patient are kept disabled for a long time while there are still rehabilitation possibilities. There is a lack



of recognition of chronic pain as a chronic health condition in the professional world. Medical advisors, occupational physicians and HCPs do not sufficiently collaborate.[CPC]

- Return to work can be a financial risk for the patient: it takes a long time to receive disability support but if the patient has disability benefits, he loses them by going to work and it is difficult to get them again afterwards. It is a closed system (kind of carcan). It is particularly relevant in low-skilled (laaggeschoolde) patients because they often get lower wages than their disability benefits.[CPC]
- Patients are worried about the current societal pressure on RTW (e.g. government's forthcoming measure requiring employers to pay for the second month of their employees' incapacity, which will encourage employers to avoid hiring patients who are regularly incapacitated, such as those with chronic pain).[Patient association]

- Key points: The current care trajectory for patient with subacute and chronic pain in Belgium presents several insufficiencies: a too-late entry in the multimodal approach, a biopsychosocial (BPS) approach difficult to be organised in primary care, limited access to the CPCs, organisational issues within the CPCs, arduous exit from the CPCs and, problematic maintain/return to work.

Potential actions

Elaboration of a care pathway for patients with chronic pain is promoted in all sources consulted. In the literature, the alignment of organisations to EBP methods or BPS approach (e.g. time for HCPs, supportive work process or access to material tools) is an enabler mentioned by several authors in the management of chronic pain. Belgian patient associations suggested to set up a care pathway for chronic pain including the BPS approach, where patients would go through the 'pain assessment' to 'psychologist' boxes, etc.. The CPCs requested as a priority that a care pathway is developed in primary care. The authors of the Belgian guideline on the management of chronic pain in primary care asked for a care pathway that streamlines collaboration between the first, second and third lines of care (including sharing relevant patient data).⁵

It is not the aim of this research to define the content of such care pathway. We present here the concrete propositions as they have been mentioned by the Belgian patients associations and the HCPs from the CPCs that we visited. There are general suggestions regarding the BPS model and the RTW. There are also more specific organisational propositions dedicated to the primary care, the specialists or the CPCs. All are useful for building an "ideal care pathway". This presentation is artificial but it is necessary to give an overview of all the results obtained. This ideal care pathway would be a stepped care with a start in primary care, followed by a build-up to second and third line (CPCs), but also a phase-out whereby the patient can be referred back to second or first line.

A rapid entrance in the care pathway: prevention, early detection of slow recovery and fast-tracked to intensive education

- To improve the BPS approach in pain management, the patient empowerment is crucial as explained in the sheet Patient centeredness. Patient must be well-informed and prepared to raise questions and understand information before their first encounter with the healthcare system. For example, patients should understand that chronic pain is not systematically related to a specific diagnosis (see "Explain pain" in the chapter 1. Introduction in the [scientific report](#)). Rather to lose energy to search a cause, they have to learn to protect their quality of life and adapt their daily life.[Patient Association & CPC]
- The prevention of chronicity starts by an appropriate management and the identification of risk factors as soon as possible, in preoperative phase in case of surgery or during the transitional phase for non predictive pains. This is a priority both for the patient associations and the CPCs. This identification can be encouraged by:
 - Sufficient time according by the GP to listen and understand the "whole" patient situation.[Patient Association & CPC] It is a question of patient-centeredness. For example, patient associations requested an approach 'looking more at the whole picture'. This means that the BPS model is not only limited to involving psychologists but also look at physical side, look at home situation, consider maintain at work, involve partners and/or children...[Patient association]
 - Systematic detection of risk factors for chronic pain (e.g. opioids use) during the preoperative phase to implement per-operative adjusted policies.[CPC]

- Tools for HCPs defining the yellow flags (e.g. anxiety) and how to assess the risk factors (such as in the KCE low back pain pathway.[CPC] Some examples of tools are provided in the literature, such as psychosocial screening tools or questionnaires in the clinic setting, embedding risk stratification tools within a computer, tablet, or mobile device¹⁴, educational videos and resources to explain pain to patients¹⁴.
- Access to the BPS management should be facilitated.
 - This implies more awareness among patients about the BPS approach, how body and mind go together.[CPC] Belgian patient associations emphasised the need for patients to have time to receive information on BPS and chronic pain before, during and after encounters with HCPs.[Patient association] Patients have to know the role of each HCPs (in particular psychologists). They highlighted the relevance of collaboration between patient associations and healthcare providers to create and distribute accessible information.[Patient association]
 - A clear recognition of chronic pain as a distinct health condition is promoted both by PA and CPC. They know that chronic pain is included in the ICD-11 classification but it seems to not be used by HCPs.

Primary care: the first step in the pathway

The crucial role of primary care in the BPS management of chronic pain is highlighted by the literature, the patients associations and the CPCs. As the BPS approach comes often too late in the pathway, patient associations suggested to organise an effective multidisciplinary pain management in primary care instead of a rapid referral to CPC. The CPCs also requested a BPS management of pain in primary care to avoid transferring patients to the centre for the slightest pain.[CPC] The aim is to reduce the overload in the CPCs and to propose appropriate management as close to the patient as possible.

This implies that:

- GPs are accessible, well-trained and have sufficient time for listening, questioning, understanding the patient situation and expectations (see sheet centeredness).[Patient association] In a group practice, it can be considered that one GP is more trained in pain management than the others.[CPC]
- All HCPs have the same vision and awareness of BPS approach for chronic pain.[CPC]
- The group of patient who needs second- and third-line care can be identified (with stratification of severity and other criteria pre-defined and known by the HCPs in primary care). Correct referral pattern should be available so that patients arrive at the right level of care at the right time.[CPC]
- Specialised psychologists are available in primary care (as in CPCs). According to patient associations, psychologists should be attracted by local organisations (i.e. eerselijnzones) to have consultation held at a centralised place. CPCs also mentioned that training in pain should be encouraged for psychologists outside the CPC and considered this action as a priority. Mobile teams (107) are also quoted by patients associations as a solution for improving access to psychological care. Indeed some psychiatric hospitals have allocated part of the residential care provision to mobile teams available to the population. The mission of these teams is the home treatment of acute or chronic mental health problems. They come to people's homes free of charge.
- Pain nurse could play a role in primary care: to support GP, to listen to patient's story as an intermediate step before going to psychologist or to educate patient how to cope with pain.[Patient association]
- There are accessible infrastructure to encourage physical activities (e.g. in physiotherapy centra).[CPC]
- Social workers should be involved in the pain management.
- A real collaboration exists between different disciplines of the HCPs from primary care rather than a work beside the others.(see sheet Interprofessional collaboration) Multidisciplinary group practices is quoted as facilitator by patient associations and CPCs. It is also proposed to create a local network on a voluntary basis (cfr. multidisciplinary community health care centres "Maison de santé" with carers but also domestic helpers, pharmacists working together in a neighbourhood as in the Ri de Ridder's book 'Au chevet de nos soins de santé').
- The HCPs might receive support from pain specialists. For example, there is a current initiative in community health care centre where pain specialists come (from CPC) to the primary care to participate in multidisciplinary sessions and provide advice.[CPC] .
- To improve BPS approach, the care pathway could include an appointment X times a year with a psychologist and a social worker, even without going into therapy; this would create a point of contact, promote a flow of information, and identify patients who need to be referred to a chronic pain centre (rather than going to emergency several times).[Patient association]



A second line aware of what the pain management means

CPCs proposed some actions to increase the sensibilisation of HCPs and improve the BPS pain management in the second line.

- Awareness-raising among all healthcare professionals to avoid iatrogenic discourse (e.g. the surgeon who says that it's not normal to be in pain 3 weeks after the operation).
- Involvement of the surgeons in preoperatively identification of the patients at risk (depending on the type of operation, age, history, etc.) and in appropriate pain management and follow-up.
- Setting up of movement centres in each hospital to provide guidance by physiotherapists to patients with pain.
- Possibility to create intermediary services for management of patient with pain in subacute phase. One example is the RSA project which proposes a subacute rehabilitation led by a duo occupational therapist-physiotherapists and a physician in physical medicine for patients identified by physical medicine assistants. Fast-track towards the CPC is possible if needed.

Better organisation, procedures and working conditions for the CPCs

As mentioned above, the ideal pathway give a more important role to primary care for the BPS management of pain (including subacute pain in transitional phase). We presented below the potential changes in the CPCs role and organisational conditions needed to support appropriate management of patients in CPCs.

- Regarding the role of CPCs, several propositions were mentioned:
 - Manage the more complex cases
 - Act as a support for primary care as explained above. It consists on a consultancy function, not a coordination for the first line. The CPCs would be available to provide advice when needed and lead a network of HCPs from the primary care. The end goal would be to abolish large CPCs (in an ideal world) and keep only a few smaller centres with very specialised knowledge and who have advisory function to the first and second line. Pilot projects are currently on-going in multidisciplinary community health centres with monthly consultations between HCPs from primary care and one specialist from the CPC (knowledge sharing).(see section below Existing experiences)
 - Provide patients education. This can take, for example, the form of information session open to the patients with chronic pain or psycho-educative workshops.
- Regarding the conditions for well-functioning, beside revision of financing support (see sheet Financing), several facilitating actions were proposed:
 - Sufficiently large teams with multi-skilled and redundant expertise to be able to replace each other.
 - Secretary able to identify patients at risk and to make a triage for referring them to the right specialist (because she knows the patients, the expertise of each team members and work process of the CPC. The presence of an administrative staff working within the clinical team¹⁴ or sufficient time to HCPs for managing the administrative tasks¹⁵ were also mentioned in the literature reviews as supportive for optimal pain management.
 - Time slots left free and fast-track procedure to insert patients with transitional pain (particularly for the risk of algodystrophy) or for certain pathologies such as active cancer process or for patients referred by HCPs from a specific network.
 - Psychiatrists involvement in the CPC team to explain patient situation and organise the BPS management.
 - Acceptation of algological function that can be practised by multiple specialists (also physician in physical medicine, nurse, etc) to emphasise the need of experts with pain knowledge (management of chronic pain) and not with specific skills (performing technical interventions).
 - Rapid empowerment of the patients. For example, patients can be encouraged to seek psychological help themselves (often in patients who have already taken this step and have higher cognitive skills), so that the multidisciplinary team does not have to be called in.
 - Revision of the funding procedure of the CPCs by the Federal Public Service Health, Food Chain Safety, Environment (FOD Volksgezondheid Veiligheid van de Voedselketen, Leefmilieu (FOD VVVL) - SPF Santé Publique Sécurité de la Chaîne Alimentaire, Environnement (SPF SPSCAE)) based on a rigorous evaluation of their functioning. It was quoted as a priority for CPCs. It was also

emphasised that the revision must not conduct to the suppression of all sources of funding since hospitals have currently no resources to invest in the psycho-social management of pain.

Supported discharge from the CPCs

To avoid blocking patients in CPC during many years and an inadequate return in the primary care, the CPCs proposed that some actions were taken in link with the care continuity (see also collaboration between HCPs) such as the elaboration of an extremely detailed medical report (10 pages with medical assessment and evaluation from each professional of the CPCs) to show to HCPs from the primary care how the CDC works, followed by telephone contacts if necessary.

Specific question of the care coordination

- The need of a care coordinator (or case manager) was mentioned by the patient associations because even though the patients are at the centre of the process, they are not always in a position to manage their illness, nor do they have all the necessary knowledge. Some patients are also very lonely, abandoned by those around them. In the literature, a lack of continuity of care, or difficulty navigating chronic pain care as a patient (e.g. different healthcare professionals and/or settings, multiple medical appointments, social difficulties) may be addressed by involving a case manager.[Patient association]
- According to Connell¹⁶, case managers can contribute to providing patient-centred care and support for patients with chronic pain.¹⁵ Furthermore, care managers may help organize teams around shared goals by ensuring each team member is aware of their specific roles.¹⁶ In order to address the specificities of chronic pain and the needs of patients, care managers should possess institutional, social and cultural knowledge and skills.^{15, 16} The literature also mentioned the return to work as a specific period where a case manager can be helpful. Their role is to establish and maintain stable communication channels around the patient.¹⁵
- The American Case Management Association (ACMA) defines case management^a as follows: "a dynamic process that assesses, plans, implements, coordinates, monitors, and evaluates to improve outcomes, experiences, and value. The practice of case management is professional and collaborative, occurring in a variety of settings where medical care, mental health care, and social supports are delivered. Services are facilitated by diverse disciplines in conjunction with the care recipient and their support system. In pursuit of health equity, priorities include identifying needs, ensuring appropriate access to resources/services, addressing social determinants of health and facilitating safe care transitions. Professional case managers help navigate complex systems to achieve mutual goals, advocate for those they serve, and recognize personal dignity, autonomy, and the right to self-determination."¹⁷
- Case management typically involves addressing complex healthcare needs and providing temporary support to enable personalised, patient-centred care. Therefore, the intensity of case management activities can vary over time and between patients.¹⁸ The care coordinator could also raise awareness among the family, informing them of what the patient is going through and liaising with them as part of the care process.
- There are several case management models, which differ according to the country or context of care, the professionals involved (e.g. nurses or social workers), the settings (e.g. in-hospital or community-based) and the levels of care concerned (e.g. primary or specialised). However, in most cases, case managers work outside the care team and do not provide care themselves.
- In Belgium, the term 'case management' covers many different situations. Case management is not a recognised occupation by the law and the professional title is not legally protected. Nevertheless, case managers are involved in some projects and institutions, but several other types of professionals may carry out the same tasks and duties without being identified as "case managers".
- In the clinical practice guidelines for the multimodal management of primary chronic pain, WOREL recommends to "consider appointing a coordinator/care manager within the primary care team so that the involved HCPs adequately contribute to achieving the care objectives of the patients."⁵

^a Case management is used in this sheet, but other terms exist, such as care coordinator, care manager, care navigator.



Several propositions regarding the organisation of case management for pain were quoted by the Belgian patient associations and the HCPs from the visited CPCs such as:

- Locate care coordination in first line areas i.e. the eerstelijnszones (ELZ) with someone who is aware of the healthcare landscape and can make targeted referrals when needed.
- Entrust this role to pain nurse for a group practice or for a local area per ELZ. Patient associations added that the local authorities within the ELZ could facilitate this proposal by supporting it and informing the local population of its existence. They also emphasised the risk that care coordination becomes an additional intermediate step opposite to more direct referral.[Patient association]
- Avoid to consider the GP as the ideal case coordinator given his/her huge workload. The role of GPs is mainly to identify patients at risk of chronicity, manage pain, timely refer the patient to the appropriate HCPs if needed...[CPC]
- Structure the care pathway in the CPC with a healthcare professional or a social worker from the team.[Patient association] However, the CPC cannot be the care coordinator for the whole management of pain (because it would be an additional intermediate step in the pathway).[CPC]
- Base the case management for pain on already existing Belgian experiences. There are pilot projects funded by the RIZIV-INAMI which offer a 'case manager' for the Multiple Sclerosis, Huntington's, Amyotrophic Lateral Sclerosis (ALS)/Charcot and Alzheimer's leagues. Participating centres were UZ Antwerpen, UZ Leuven and Jessa (Hasselt). The feedback has been positive, as there is a kind of recognition of what patient associations are already doing informally, and the coordinators are people who know the disease, who know what it's like to be a patient. These RIZIV-INAMI projects give continuity and support to the associations' initiatives.[Patient association] According to the CPCs, the support of ability managers is useful. They start a parallel project with the patients alongside the medical/psychological care and immediately search for possibilities of reintegration of the concerned patients. This should be structurally integrated in the operation of the pain centres, which was promised years ago but never implemented.(personal communication).
- Set up a hotline or referral platform for patients where patients can find information and support to go through the care pathway.[Patient association]

The RTW as a priority

Professional activities are crucial for patients with pain and are an important part of management. However, as mentioned in the Background section above, the maintain and/or return to work is not facilitated in Belgium.

This issue is considered as a priority for the patient associations and the CPCs. They formulated several propositions such as:

- Encourage employers to comply with standards around working hours, overtime, etc. in order to reduce work pressure.[Patient association]
- Change the mentality around work, break stereotypes such as "you have to wait until the patient is better to work" (when it is the opposite).[CPC]
- Encourage part-time work for patients with pain.[CPC] Patient associations mentioned that in the Netherlands, workers can choose how work package is distributed over the working week.
- Allow teleworking for some patients (see Patient-centeredness sheet).[CPC]
- Develop pathways for the RTW and guidance for sick employees to prevent the patient from mobilizing his energy just to find himself faced with refusals.[Patient association]
- Involve medical advisors from sickness funds and occupational physicians to the care pathway development.[Patient association]
- Facilitate professional reorientation.[Patient association] Patient associations suggested the recognition of chronic pain based on the disability recognition model which leads companies to employ disabled people. With this model, companies could be encouraged to employ people with chronic pain (e.g. a minimum percentage) and would not be penalised if the worker is absent.
- Provide concrete support to the patients. Patient associations mentioned the examples of job coaches funded by some associations such as Rheumanet to get people with disabilities back to work. These job coaches have multidisciplinary skills and can perform psychological and social assessments. This could be extended to chronic pain.[Patient association]

- Consider the assessment of work abilities by multidisciplinary team rather than a medical advisor alone. [Patient Association]
 - Adapt some financing rules. For example, current premium (e.g. 'Vlaamse ondersteuningspremie – VOP') only applies if you hold the same job, but this is often no longer possible and therefore many patients miss out on this premium. [Patient association]
 - Entrust the Walloon Agency competent for policies relating to health, welfare, support for the elderly, disability and family allowances (called 'Agence pour une Vie de Qualité – AVIQ') and the Flemish Public Employment and Professional Training Service ('Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding – VDAB'), to play a more important role in RTW. [Patient association]
 - Set up a working group between sickness funds, regional employment services (i.e. Actiris, FOREM or VDAB), employers, etc. [Patient association]
 - Facilitate voluntary work for people who really can't work any more since contribute to the society is rewarding. [Patient association]
- **Key points:** Several proposals were identified to develop an ideal care pathway for the multimodal management of chronic pain in Belgium: Empowered patients and Early detection of patients at risk for chronicity; Reinforced role of primary care (much more close to the patients); Appropriate intermediary services in second line; CPCs "being with it" for complex case and primary care support; Adequate conditions (including at work) to exit from the CPCs.

Existing experiences

The aim of this section is not to define precisely the content of the ideal care pathway to manage chronic pain but to emphasise experiences that can be useful if such an initiative is taken in Belgium or was experienced abroad.

- In Belgium, one interesting experience on care pathway for patients with pain is the clinical pathway for low back pain and radicular pain that was elaborated by a huge group of experts and stakeholders in 2017 (<https://kce.fgov.be/en/publications/all-reports/low-back-pain-and-radicular-pain-development-of-a-clinical-pathway>).¹³ This pathway was translated in an interactive tool for HCPs from primary care and specialised care and contains several practical supports for clinicians (e.g. checklist for the assessment of yellow flags) and for patients (e.g. links towards videos explaining low back pain). It encompassed also some advice regarding the maintain/return to work.
- Regarding case coordination, in the "Protocol 3" projects (where the term case manager is used), case management is a care coordination for vulnerable elderly people, with the aim of delaying institutionalisation in nursing homes.¹⁹ In oncology, healthcare professionals also help patients navigate the healthcare system. In memory clinics, social workers coordinate care for patients. Sickness funds companies (often through their social services) can help patients organise care and home services. Regionally financed services, such as care coordination, also coordinate home care and services when needs are complex and navigation of the health system becomes difficult. Currently, this is organised in Flanders by the eerstelijnzones, in Brussels by Brusano (<https://www.brusano.brussels/pdf/fonctions-cliniques-daccompagnement-pour-les-personnes-en-situation-complexe/>) and in Wallonia by l'AVIQ (<https://www.aviq.be/fr/soins-de-sante/soins-et-aides-domicile/coordination-soins-et-aide-domicile>)
- To integrate social help in the healthcare system, there are also Belgian initiatives. Social prescribing, whereby healthcare providers refer patients to non-medical initiatives that can contribute to their well-being and health, has gained popularity in Belgium in recent years. Various initiatives have been launched under the banner of social prescribing, including the ZIHP project in Antwerp and the caring museum in several cities in Belgium. The project in Antwerp enables a social nurse to work free of charge in the general practice for a certain period to support general practitioners in caring for patients who are struggling with problems in various areas (including physical health, finances, housing, mental health issues, loneliness, family or parenting problems, etc.). This nurse assists patients by directing them to the appropriate welfare providers and helps the GP practice to familiarize itself with the welfare landscape in the region ([Het ZIHP-project van Stad Antwerpen - zipster.care](https://www.zipster.be/)). The caring museum in its turn strives for the recognition of the museum as a genuine meeting place for everyone in general and for the healthcare sector and its patients in particular, and to build bridges between the medical and healthcare world, the museum world, the social world and the academic world (<https://www.icom-belgium-flanders.be/wp->



[content/uploads/2024/02/20240115_Caring-Museum_Senaat_DEF_NL-2.pdf](content/uploads/2024/02/20240115_Caring-Museum_Senaat_DEF_NL-2.pdf)). In addition to Belgian initiatives, projects are also being set up at European level. Belgium is also involved in the EU HORIZON project on social prescribing to promote and improve access to health and care services for people in vulnerable situations in Europe (<https://cordis.europa.eu/project/id/101155873>).

- Work incapacity is a paramount topic in Belgium given the increase number of people concerned by this situation and Belgian authorities have taken several actions to encourage the maintain or return to work. We can describe some of them but It is likely that changes will occur soon, given that the Belgian government is currently focusing on this topic.
 - After four weeks of work incapacity, a reintegration trajectory can begin (starting with informing the worker about reintegration possibilities). In this trajectory, workers, prevention advisers- occupational physicians, employers and medical advisors collaborate to find the best solution. Several checklists were defined to support the process.(In Dutch: [Re-integratie van arbeidsongeschikte werknemers | Federale Overheidsdienst Werkgelegenheid - Arbeid en Sociaal Overleg](#) and in French: [Réintégration des travailleurs en incapacité de travail | SPF Emploi - Travail et Concertation sociale](#). The Belgian knowledge center on well-being at work (BESWIC) is a source of information for the work reintegration (in Dutch: <https://beswic.be/nl/themas/gezondheid-en-re-integratie-van-de-werknemer/re-integratie-op-het-werk> and in French: <https://beswic.be/fr/themes/sante-et-reintegration-du-travailleur/reintegration-au-travail>).
 - The RIZIV-INAMI proposes a return-to-work trajectory that provides patient support to look for an adapted or another job and to update or acquire new competencies by training if needed (In Dutch: <https://www.riziv.fgov.be/nl/thema-s/socio-professionele-re-integratie> and in French: <https://www.inami.fgov.be/fr/themes/reinsertion-socio-professionnelle>).
- Since 2022, the RIZIV-INAMI proposes also a return-to-work trajectory that includes the support of a RTW coordinator. The aims of the coordinator are to accelerate and increase the number of people who start a RTW, to accelerate and increase the number of returns to appropriate employment, to act in a more targeted and more personal way and to use existing services (federal and regional) more efficiently. A close collaboration between the patient, the RTW coordinator, the medical advisor of sickness fund, the treating physician, and the occupational physician if the individual is under an employment contract (in Dutch: [Het "Terug-naar-werktraject" met de steun van een coördinator | RIZIV](#) and in French: [Trajet Retour Au Travail avec le soutien d'un Coordinateur | INAMI](#)).
- The 1st February 2025, Emino and GTB (het Gespecialiseerd Team Bemiddeling) have been joining forces in "Werkschakel," a consortium that, in collaboration with healthcare and welfare organizations, will annually connect nearly 4,000 people with health challenges to VDAB (Flemish Employment Agency).(<https://www.gtb.be/nieuws/vanaf-1-februari-ondersteunt-werkschakel-personen-met-gezondheidsuitdagingen-richting-werk>). Werkschakel offers people with health challenges throughout Flanders the opportunity to take steps toward a suitable employment pathway, with registration with VDAB being considered a crucial first step. Their approach is somewhat complementary to the approach of the ability managers but also successful.(personal communication)

Outside Belgium, the CPCs mentioned that concerns are similar in several countries (e.g. too much invasive treatments). They highlighted some actions such as in the Netherlands or Sweden where steps have been taken to prevent unnecessary technical interventions.[CPC] They also evoked that some pain centres are not led by physicians but by professionals from the rehabilitation world or psychologists as in the U.K.[CPC]

In Italy, an interesting initiative was taken end 2024 by establishing a national toll-free number that offer to patients the opportunity for asking advice to medical specialists on how to deal with pain safely and effectively.⁷⁾

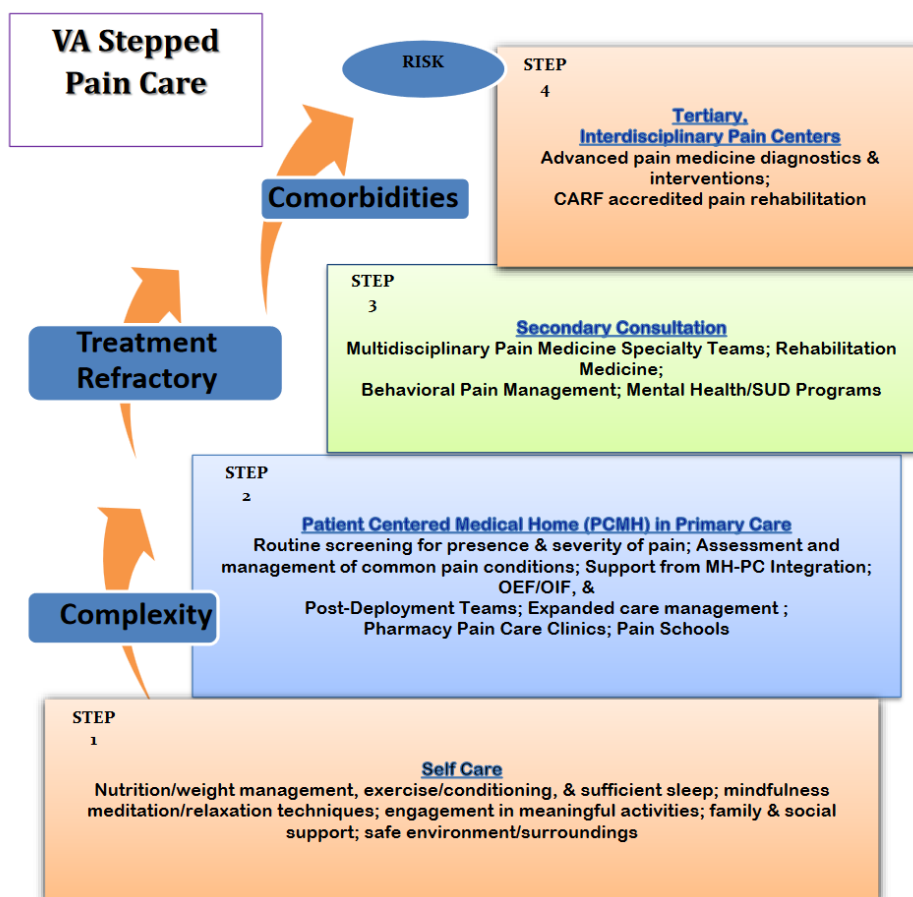
We present three care pathways from countries below because they are useful to define some points of attention for the Belgian situation.

1. The U.S.

In 2015, the National pain strategy promoted delivery of integrated, multimodal, interdisciplinary care that is effective and safe. The National Academy of Medicine (NAM), previously name Institute of Medicine (IOM), advocated consistent and complete pain assessments, payment reform to foster coordinated interdisciplinary care, and greater support for primary care clinicians to deliver the most effective, safe, and timely care, including more opportunities for consultations with pain specialists. As illustrated in the figure 1 below, the National pain strategy 2015 proposed a stepped pathway starting by self-care and passing through all level of care toward the third line.

Figure 1 – The VA Stepped Care Model of pain care

Source: Institute of Medicine “National Pain Strategy, A Comprehensive Population Health-Level Strategy for



Pain. 2015. (https://www.ninds.nih.gov/sites/default/files/documents/NationalPainStrategy_508C.pdf)

According to Violini et al., significant improvements in patient journeys have been achieved in the United States of America these last years by adopting care models that provide a patient-centered, evidence- and outcome-driven, multidisciplinary approach to chronic pain assessment and management.⁷

2. Sweden

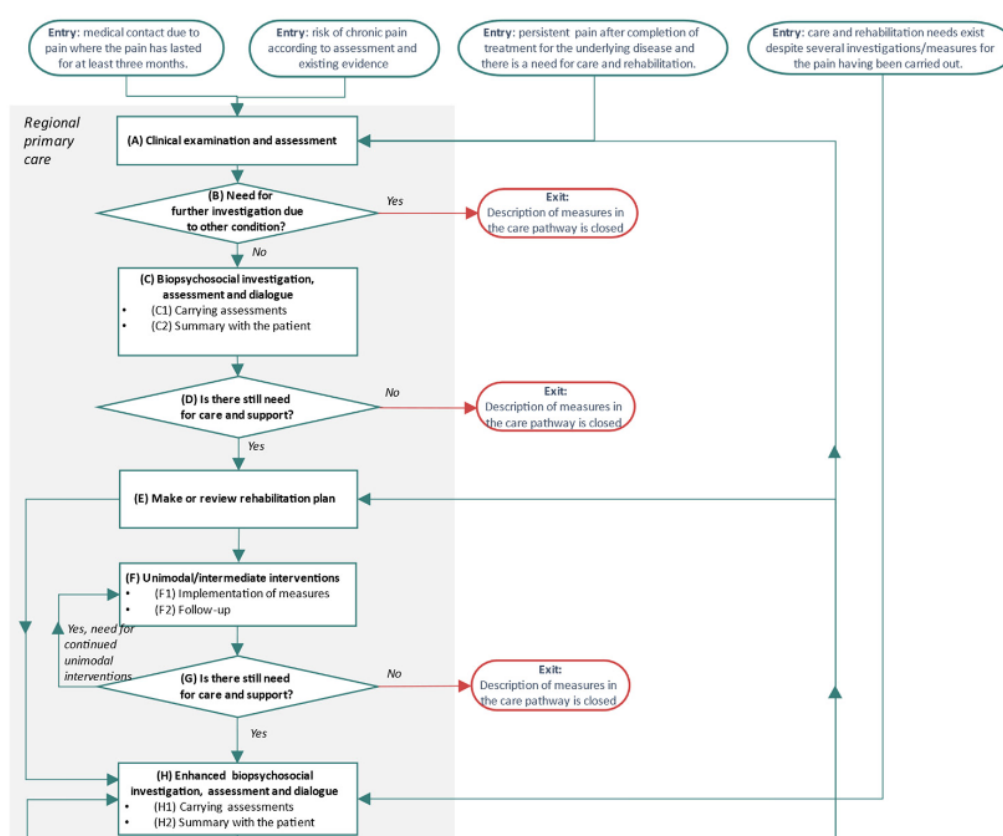
In 2023, the Swedish Task Force for Chronic Pain delivered a comprehensive presentation on the recently launched Swedish National Healthcare Pathway for Chronic Pain in adults. (<https://europeanpainfederation.eu/sip-news/a-swedish-national-healthcare-pathway-for-chronic-pain/>)



The overall aim of the care pathway is to empower healthcare professionals in delivering a proficient level of care and administering evidence-based treatments for adult patients experiencing chronic pain. Increase continuity and safety, elevate the proportion of patients capable of managing their pain early on without further medical intervention, enhance cooperation within and between levels of care or reduce costs for individuals, the healthcare system, and society are other goals aimed by this initiative.

The healthcare pathway begins with pain lasting at least three months or if there is a risk of developing chronic pain (see Figure 2 below), and concludes when the patient can manage the situation without requiring additional healthcare support.²⁰

Figure 2 – The Swedish algorithm for pain



See the whole pathway algorithm here (<https://www.degruyterbrill.com/document/doi/10.1515/sjpain-2024-0082/html>)

Source: Fischer M. R., Abbott A., Björk M., Jansen G. B., Göran G., Stålnacke B. M., et al. An action plan: The Swedish healthcare pathway for adults with chronic pain. *Scand J Pain* 2025 Vol. 25 Issue 1.²⁰

Fischer et al. concluded that the P3C pain pathway (P3C for person-centred and coherent care) addressed the challenges described by patients and practitioners. It “can promote patient empowerment and equality in care, with emphasis on early and timely interventions, dialogue between patients and practitioners and between levels of care, self-management of pain instead of prolonged medical intervention, value-driven and coordinated care contacts, and increased knowledge about chronic pain, based on existing evidence and experience.”²⁰

3. The U.K.

The United Kingdom has also adopted a hybrid treatment approach that relies on evidence-based decision-making and considers the preferences of both healthcare providers and patients, including the diverse needs of individuals coping with pain.⁷

In 2022, a document was published by the Faculty of Pain Medicine proposing an overarching framework to deliver improved pain management across the whole healthcare sector across all four nations of the UK.²¹ It includes health promotion and prevention, primary and community care assessment, triage and management, long-term condition management and planned specialist care. In this document, there is a national oversight of the overall strategy and integration for main management across all centrally managed or governed policies and services.

Each level contains a list of recommendations such as:

At the Whole Population (First Access – point of first contact) level:

- Develop self-referral pathways, risk stratification and support to live well with pain.
- Implement health promotion and prevention opportunities.
- Include shared decision making and social prescribing.
- Collaborate with primary and specialist pain services to fast-track patients with potential serious illness, complex pain or failing to progress.
- Work collaboratively with primary and specialist pain services, developing multidisciplinary working to optimise patient management opportunities.
- Formalise communication and sharing of information between services to provide best patient management planning and delivery.

At the level of people with chronic pain (Primary Care, community services)

- Triage patients for known conditions, complex and high-risk patients for urgent or rapid referral.
- Work collaboratively with community and specialist pain services developing multidisciplinary working to optimise patient management opportunities.
- Support the development of advice and guidance services if referral may not be required.
- Support the development of medication optimisation pathways.
- Education is key to engage and support GPs, nurses, pharmacists, physiotherapists and other allied health practitioners to effectively use referral structures as well as support them to manage patients nearest to their locality where appropriate.

At the complex chronic pain (Specialist pain services) level:

- Collaborate with primary and community care providers.
- Optimise referral pathways across the framework including rapid access and complex inpatient referrals.
- Support the development of advice and guidance services including virtual solutions.
- Support the development of medication optimisation pathways.
- Engage with multidisciplinary working across primary, secondary, and tertiary services at a regional level (see above).
- Engage with the professional development strategy encompassing clinical, shared learning and service development.
- Provide integrated personalised care through specialist multidisciplinary pain management teams including complex interventions (physical, emotional and social).
- Support mapping of pain complexities by setting up national registries and gathering evidence through collaborative research with various national research bodies.
- Facilitate cross specialty integration to enable multidisciplinary working particularly in complex patient groups (e.g. pain and dependency, people who use drugs, pain in the elderly).



4. France

The Haute Autorité de Santé (HAS) published on his website (https://www.has-sante.fr/upload/docs/application/pdf/2023-02/fiche_parours_de_sante_dune_personne_presentant_une_douleur_chronique.pdf) different care pathways regarding pain: adults, children and adolescents, vulnerable persons and, patients with cancer.

Ten key points are presented by the HAS to be followed by any care pathway for chronic pain:

1. Each pain must be taken into account (with identification of red flags, assessment of risk factors for chronicity, management BPS...
2. The pain assessment must be based on instruments validated for each population
3. Pain management is patient-centred, promoting self-management and pain education.
4. Pain management is sometimes curative but more often adaptative, multimodal and over a long period of time. It must be evidence-based.
5. The care pathway is organised in steps over the three care levels and needs an interprofessional coordination. GP and primary care team in the level 1 are responsible for the follow-up.
6. Level 1 is mainly composed of the general practitioner, the nurse, the physiotherapist, the pharmacist, and the psychologist. Other professionals, such as the occupational physician, the school doctor or nurse, the social care assistant, and the adapted physical activity and health instructor may also be involved. They have to manage a majority of chronic pain.
7. Level 1 is supported by local pain consultations and centres for the assessment and management of chronic pain. They include a dedicated hotline, telehealth services, data-sharing and knowledge-sharing tools, as well as training programmes.
8. Level 2 encompasses pain consultations and centres as well as specialist hospital services. They are mobilised by Level 1 physicians in cases of refractory chronic pain, i.e. pain resistant to well-conducted Level 1 treatments.
9. Level 3, which is composed by the centres for the assessment and management of chronic pain, is mobilised by Level 2 for difficult situations that exceed their capacity for assessment or management.
10. Some tools are edited by the HAS to support the level 1.

➤ **Key points:** Care pathways from abroad present different steps, starting with self-care until the discharge from (tertiary) specialist, interdisciplinary pain management teams. In Belgium, there is currently no care pathway for pain management but some initiatives could be used to develop one.

Action points proposed for Belgium

Action point 2. Define an ideal care pathway for patients with subacute and chronic pain.

Action point 2.1. Elaborate a Belgian stepped-care pathway for patients suffering from, or at risk of, chronic pain.

This pathway should:

- Start at (sub)acute phase of pain.
- Ensure an early or even pre-emptive identification of risk factors for chronicity by increasing HCPs awareness and offering to them validated assessment and monitoring tools.
- Promote patient empowerment by ensuring that HCPs actively consider patient needs, facilitate patient education, and engage in shared decision-making processes. This includes collaboratively defining treatment goals and determining, together with the patient, appropriate (moments for) referral to alternative therapeutic options (see sheet Patient centeredness).
- Base the subacute and chronic pain assessment and management on up to date evidence and existing guidelines (e.g. WOREL guidelines for primary care).

- Develop special care guidelines if needed (e.g. management in CPCs).
- Ensure access to multimodal management with potential fast-tracks if needed at primary care as in second or third line.
- Provide a clear definition of the role of each HCP and each line of care, both for the sake of the HCPs themselves and the patients.(see sheet Interprofessional collaboration)
- Enhance the role of primary care in the assessment and multimodal management of pain by establishing clear referral patterns.
- Involve the second line as intermediary service between primary care and CPCs for pain management.(see sheet Interprofessional collaboration)
- Allow the CPCs to mainly focus on the more complex cases and on a role of support for the other lines.
- Organise the collaboration between the first, second and third line of care (see sheet Interprofessional collaboration)
- Provide patient support to understand the navigation in the pathway (such as an online platform, call centre, or register with reminders)
- Consider the added-value of a case-manager in the process.
- Take into account the principle of proportionate universalism i.e. the size and intensity of the BPS care should be tailored to the patient groups' needs.
- Ensure that regular re-evaluation of patient outcomes is performed in link with the care management plan.
- Include the maintain and return to work as soon as possible in the patient management.
- Facilitate a smooth transition of the patient from the CPC to primary care.

Action point 2.2. Define the implementation conditions of the care pathway at all care levels in terms of financing and organisational resources.

- Start with mapping and reviewing the pain services by location and needs analysis.
- Propose practical tools such as a database with pain specialists or a toll-free number where patients can speak to medical specialists ready to advise them on how to navigate the care pathway.

Stakeholder feedback

Action point 2.1. Elaborate a Belgian stepped-care pathway for patients suffering from or at risk of chronic pain.

Few respondents (n=3/55) expressed doubts about the acceptability of the first action point whereas more expressed on its feasibility (n=17/54).

The stakeholders have positively emphasized the need for a clearly defined care pathway to improve the management of chronic pain. Such a pathway would help standardize clinical practices, reduce waiting times and uncertainty, and avoid long therapeutic wandering. The implementation of evidence-based guidelines is essential, as demonstrated in the management of other medical conditions. Given the complex, multidisciplinary nature of chronic pain and its high prevalence, many stakeholders view the development of a stepped care model as both feasible and necessary. This model should serve as a guiding framework for structured, coordinated, and personalized care.

However, there are also several concerns:

- Chronic pain is so diverse that it is difficult to agree on a single pathway that will propose one-sided approach to the problem, which only truly applies to a limited number of patients. Chronic pain is too multifactorial and complex to receive simple answers.
- It is proposed rather to develop a baseline care pathway that should always be followed with specific additional features to adjust for the many different situations. This will allow to incorporate the necessary flexibility in pain management and be viewed from a goal-oriented care perspective.
- It is important to consider that patients with chronic pain can have other diseases and that several pathways (e.g. diabetes, cardio-vascular) have to be combined.
- Risk factors for chronicity are well known for low back pain but are less clear for other chronic pain conditions.
- The start of the pathway should be as soon as possible. Even at the acute phase, pain neuroscience education can be useful to struggle with the misconceptions of a patient. For some stakeholders, it would be useful that the CPCs manage at-risk patients or provide support to the primary care from the subacute



phase to avoid (or decrease) chronicity. However, these additional tasks risk to increase (already very long) waiting times for the patients with complex and disabling chronic pain syndromes.

- The idea of "fast-track access" whether in first, second or third line is excellent but needs organisational changes in practice.
- Patient empowerment constitutes a fundamental element of the care pathway. However, some CPCs indicate that they are confronted with a changing patient demographic (such as migrant population) who may not readily embrace the biopsychosocial model of care. Facilitating patient cooperation in this context is essential. The non-profit organization "Patient Empowerment," along with the Patient Expert Center, possess specialized expertise in addressing these challenges
- Collaboration between lines of care is not so simple. There are many involved parties and all must realize that their own interests (including financial ones) should not prevail, but the interests of the patient (i.e. personalized care) should. Many steps will be needed. The primary care line is generally rather fragmented (except for interdisciplinary group practices) with HCPs who do not necessarily want to collaborate. Available expertise in primary care is considered as insufficiently developed (both in terms of knowledge and staffing). In addition, true collaboration requires time for discussion between different HCPs, time that is not currently financially valued in fee-for-service practices. Finally, for collaboration to be effective, it is essential that all HCPs adhere to established clinical practice guidelines. However, verifying guidelines quality can be challenging for each HCP, particularly when the focus of the guidelines is a topic from other disciplines
- The second level, called intermediary services, is not well defined in practice.
- Case managers can be employed and new roles for peer support professionals can be implemented but this should not complicate pain management by introducing an additional intermediary. The medical responsibility remains with the general practitioner and specialist.
- Longitudinal follow-up with a social worker could ensure social support. However, in Belgium, healthcare and social support are dependent on several different authorities. This creates grey areas, delays, and a lack of coordination between all providers.
- The freedom of choice of the health care provider or social provider remains important, but a slight coercion would certainly lead to more and better results.
- Regular assessments of patient outcomes should be ensured, taking into account the objectives of the care plan. This does however imply that attention must be paid to the chosen objectives.
- Some practical implementation issues are mentioned such as a sufficient concentration of care so that the patient doesn't have to visit different hospitals. Everything depends on how this is integrated into the patient's life and how constant feedback can be generated, both individually and collectively.
- A care pathway needs financing and structural resources. For example, the stakeholders mentioned that tertiary centres (especially university centres) need much more (financial) support. They currently receive the same support as secondary centers, while they are treating patients who have exhausted their treatment options in peripheral centers and are in complex situations.
- Returning to work should be paramount, but it is such a complex issue that physicians are almost penalized for it afterwards. Patients often want to remain active, but this is only possible if appropriate support and accommodations are provided. Forcing a return to work without these conditions would be counterproductive and could worsen the situation. Back-to-work initiatives and monitoring by occupational physicians should be actively offered through the health insurance funds.
- In conclusion, virtually all elements of this care pathway are familiar to the healthcare providers involved through existing guidelines; however, there remains a significant gap in their consistent implementation.

Action point 2.2. Define the implementation conditions of the care pathway at all care levels in terms of financing and organisational resources.

Some respondents expressed doubts about the acceptability of the second action point (n=8/55) or its feasibility (n=9/54), or declined to comment on its acceptability (n=2/55) or feasibility (n=5/54).

The stakeholders mentioned concerns both on the mapping of the pain service and on the practical tools.

Mapping:

- Regarding CPCs, there is already a list of « certified » centres. However, this geographic distribution says little about the quality of care provided in a specific centre.

- While it is easy to identify second or third line services for chronic pain management, it seems impossible in the first line. The first obstacle is the fragmentation of this line: healthcare providers treating patients suffering from chronic pain do not all work under the same roof. The second obstacle is the patient's free choice (in the fee-for-service system) and the difficulty to maintain an effective collaboration with a large number of providers who do not work under the same roof. The third obstacle is the "locking in" of flat-rate practices: if a pathway offers a patient interdisciplinary care under the same roof in a flat-rate structure while the patient is not part of it, this is closed to him unless he changes general practitioner, physiotherapist and nurse.
- To be conducted, this analysis will require funding, also to effectively implement it. The additional investment must be balanced with other priorities within the overall healthcare system.
- Key questions arise regarding the scope and governance of this initiative. Specifically, it remains unclear whether the framework is intended to operate at a national level or within a (local) regional context. Furthermore, the definition of 'services involved in treatment' requires clarification—does this encompass only the CPCs, or are primary and secondary care providers also included? The decision-making authority and the criteria for inclusion in the database must be explicitly defined. Additionally, mechanisms for quality assurance should be considered. For instance, it is debatable whether a Dutch-speaking university located in Brussels qualifies for inclusion solely based on geographic distribution, without further relevance criteria.
- This mapping should be used not only for pain but for the global health and social determinants
- A starting point could be to reevaluate the geographical distribution of (specialized) multidisciplinary pain centres based on needs.

Practical tool: Database with pain specialists

- Because some patients do not know where to go or who to contact, listing services into a reliable and updated database is considered as important by some stakeholders. Some patient associations already perform this work but they could also support the dissemination of the database. This can ensure greater equity in care. However, other stakeholders mentioned that it is undesirable for patients to start calling medical specialists themselves. Many aspects of the biopsychosocial model can only be understood through face to face consultation. Pain specialists are already overburdened and direct access could come with a risk of a further increase of their workload.
- A database of pain specialists should be incorporated into the care pathway so that the general practitioner or treating physicians, knows who to refer to and when. The primary care should work as gatekeeper. This is unrealizable as long as healthcare funding isn't changed, as long as primary care isn't strengthened and reformed, and as long as collaboration isn't implemented differently (truly interdisciplinary and truly integrated based on the needs of the patient), it's yet another open door for expensive specialized care. People with chronic pain need to be helped quickly and efficiently, and continuity of care must be guaranteed. But first, healthcare must—finally—be reorganized
- There is also the question of the definition of pain specialists: who should be on the list i.e. what constitutes a pain specialist? And how to be sure they work in the same care philosophy?
- Finally, to be sure that the list is up-to-date, financing and human resources will be regularly required.

Practical tool: toll-free number

- A toll-free number can be understood - by patients and HCPs - as if there is a simple and rapid solution for chronic pain. Given the complexity of (chronic) pain, a phone "consultation" to give advice would be inappropriate or even dangerous
- It may not be necessary, as any general practitioner, pharmacist, or hospital should be able to provide this information. A webpage with general information and referral options could be developed instead.
- Pain nurses already perform this orientation role in hospitals and sometimes between hospitals when they know each other.
- A toll-free number requires trained staff and stable funding. This raises a lot of questions: which organisation can take this role, which limits will be given to the questions (will medical questions also be accepted for example), how can we make sure that the respondent has the appropriate competencies to do it?
- Not all patients are able to use phone.



Amended action points

Action point 2.1. Elaborate a Belgian stepped-care pathway for patients suffering from or at risk of chronic pain. This pathway should:

- Start at (sub)acute phase of pain (and in pre-operative phase).
- Ensure an early or even pre-emptive identification of risk factors for chronicity by increasing HCP awareness and offering to them validated assessment and monitoring tools.
- Promote patient empowerment by ensuring that HCPs actively consider patient needs, facilitate patient education, and engage in shared decision-making processes. This includes collaboratively defining treatment goals and determining, together with the patient, appropriate (moments for) referral to alternative therapeutic options.
- Base the subacute and chronic pain assessment and management on up to date evidence and existing guidelines (e.g. WOREL guidelines for primary care).
- Develop special care guidelines if needed (e.g. management in CPCs).
- Ensure access to multimodal management with potential fast-tracks if needed at primary care as in second or third line.
- Provide a clear definition of the role of each HCP and each line of care, both for the sake of the HCPs themselves and the patients.(see sheet Interprofessional collaboration)
- Enhance the role of primary care in the assessment and multimodal management of pain by establishing clear referral patterns.Involve the second line as intermediary services between primary care and CPCs for pain management.(see sheet Interprofessional collaboration)
- Allow the CPCs to mainly focus on the more complex cases and ensure financial and structural resources to add a role of support for the other lines.
- Organise the collaboration between the first, second and third line of care (see sheet Interprofessional collaboration)
- Provide patient support to understand the navigation in the pathway (as online platform, call centre, or register with reminders)
- Consider the added-value of a case-manager in the process.
- Take into account the principle of proportionate universalism i.e. the size and intensity of the BPS care should be tailored to the patient groups' needs.
- Ensure that regular re-evaluation of patients outcomes is performed in link with care management plan.
- Include the maintain and return to work as soon as possible in the patient management.
- Facilitate a smoothly transition of the patient from the CPC to primary care.

Action point 2.2. Define the implementation conditions of the care pathway at all care levels in terms of financing and organisational resources.

Two action points have been identified, although in-depth discussions with implementation experts will be necessary to obtain a precise definition of the conditions for implementing the pathway.

- Start with mapping and reviewing the pain services by location and needs analysis.
 - This analysis will require a certain budget, which will be further increased by the difficulty of mapping primary care services (in particular due to fragmentation, the multitude of care providers and locking in or flat-rate practices). Subsequently, a clear delineation of this analysis will be necessary, which should also examine whether, in addition to geographical distribution, such an analysis can also contribute to knowledge about the quality of the current services.
- ~~Propose practical tools such as a database with pain specialists or a toll-free number where patients can speak to medical specialists ready to advise them on how to navigate the care pathway.~~
- Define the practical tools necessary to facilitate the orientation of patients at risk for, or with, chronic pain. A list of pain specialists could be developed based on the HCPs training and professional qualification. However, such a list will require renewing resources for regular updates.
 - Making this list available only to healthcare providers (rather than to both healthcare providers and patients) as a tool for referrals may enable primary care to better fulfil its role as gatekeeper, thereby



keeping the workload of pain specialists under control. However, adjusting the financing system, strengthening primary care and improving collaboration are important prerequisites for achieving the desired outcomes of improved continuity of care. The reorganisation of care can therefore be regarded as a necessary starting point.

Objectives of the action points

The elaboration and implementation of a care pathway on chronic pain should allow:

- To improve the quality of care and the patient's satisfaction by selecting the best therapeutic option at the best time depending on each patient.
- To enforce the implementation of a the BPS model of care
- To decrease the "translation gap" between guidelines and clinical practice by identifying the facilitators and pitfalls regarding some clinical recommendations.
- To reduce the practice variation between practitioners and settings.
- To optimize the use of resources by for example avoiding duplicate examinations or overtreatment.
- To decrease the risk of chronic pain and long term job-disabilities.¹³

Target stakeholders

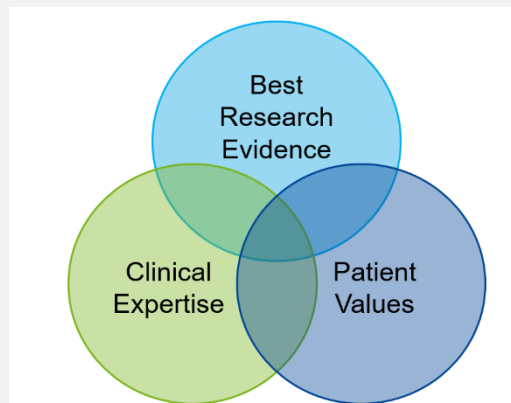
- HCPs associations
- Patient associations
- Hospital representatives
- Social sector representatives
- Work sector: Employers, occupational physician, medical advisors from sickness funds

Points of attention or required conditions

- The population of chronic pain patients is characterized by a diversity in pain (experience), patient presentation and specific situations. Developing one pathway for all is challenging and is not in line with the concept of patient-centred care. It therefore makes more sense to aim at the development of a baseline pathway with specific features on top of it for the many different situations.
- The identification of risk factors is crucial in the prevention of chronic pain. There are known in low back pain but further research is needed in several chronic pain conditions to identify these risk factors.
- It is necessary to present a coordinated and convincing argument to place patient education at the heart of chronic pain prevention and management.
- Healthcare and social professionals are already working in stressful conditions (due to the economic crisis), so it is important not to exacerbate their negative feelings giving them additional tasks without providing appropriate support.
- The current shortage of GPs and psychologists specialised in pain can hinder the primary care involvement in the early management of pain.
- The second level, called intermediary services, is not well defined in practice.
- CPC teams are overwhelmed, often resulting in appointment delays of several months due to limited capacity and high demand. It would be useful if CPCs would already provide support to primary care in the (sub)acute phase to prevent the chronification of pain. This would however require resources to compensate for the associated increased workload.
- Collaboration between lines of care is not so simple. There are many involved parties and all must realize that their own interests (including financial ones) should not prevail, but the interests of the patient (i.e. personalized care) should. Many steps will be needed.
- Healthcare and social support are dependent on several different authorities. This creates grey areas, delays, and a lack of coordination between all providers.
- The care pathway should guarantee the freedom of choice of the HCPs by the patients.
- HCPs need appropriate training and guidelines and the recognition or designation of (certain) specialisations could help to provide healthcare providers (and patients) with more guidance when navigating the extensive and diverse healthcare landscape (see sheet HCPs training).
- The triad of the evidence-based practice concept must be reminded to all HCPs.



Figure 3 – Triad of the evidence-based practice concept.



Source: Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. [*Evidence based medicine: what it is and what it isn't*](#). BMJ. 1996;312(7023):71-72

- To support the implementation of guidelines, it is important to involve HCPs in their development. This will immerse them in the evidence and enable them to contribute their insights on feasibility, barriers and facilitators.
- Patient consent is required before involving a partner or employer.
- Professional re-integration strongly depends on the availability of adapted jobs and therefore on the willingness of employers to provide such jobs.
- The sustainability of the proposed tools is questioned.
- The definition of pain specialists is not clear. Mechanisms for quality assurance should be considered.
- Pain specialists are already overburdened and direct access could come with a risk of a further increase of their workload.
- A toll-free number risks oversimplifying complex care needs and could lead to inappropriate or unsafe advice. Alternatives such as informative web platforms and leveraging existing roles like pain nurses are preferred, given concerns about staffing, funding, scope of responsibility, and accessibility for all patients.

1.3 Interprofessional collaboration

Improve interprofessional collaborations

Definition

Interprofessional collaboration is an integrative element at the meso levels of the healthcare system. It consists of collaboration between different healthcare professionals (HCPs) involved in the biopsychosocial (BPS) approach in order to provide continuous, comprehensive and coordinated continuum of care to patients with chronic pain.²²

Background

The need of networking through the interprofessional collaboration is vital for managing chronic pain ¹¹, particularly as the biomedical approach can be ineffective, generating feelings of frustration and loneliness among caregivers.²³

- The literature review has showed that access and availability of a clinical support system and well-functioning interdisciplinary network is needed and considered as an enabler for the multimodal management of chronic pain.^{14-16, 24, 25} However, there are several gaps in the HCPs collaboration. The non homogenous treatment orientations are one of them, leading to inefficient communication between professionals or feeling of conflicting relationship. This could create an uncomfortable feeling that healthcare colleagues were not working on the same side as each other or the patient.²⁶ This can also give rise to contradictory patient information and confusion.^{14, 27} In return to work for example, although multidisciplinary teams work together, poor communication between professionals from different organisations resulted in conflicts between the medical professionals, employers, and the employees.^{15, 28}

Another gap in the interprofessional coordination mentioned in the literature is the access to other HCPs. This can be due to spatial or organisational distance but also to lack of specialists available.¹⁴

- In Belgium, there is a lack of coordination between healthcare professionals themselves and a lack of coordination between healthcare and social services professionals.[Patient association & Personal communication] The structure of primary care is fragmented with care providers often working in silo. Therefore, when developing a network, key players such as occupational physicians, medical advisers and pharmacists, who can support patient education, are often overlooked.[Personal communication]
- According to the CPCs, there is a need to create a network between primary care and CPC.[CPC] The relationship between primary and specialised care is viewed as a parallel process, with specialised care supporting primary care. Primary and specialised care are viewed as complementarity, and each professional contributes their expertise to the other.[Personal communication] This complementary approach is supported by the recommendations of the authors of the Belgian guideline on the management of chronic pain. They recommend that patients with primary chronic pain should continue to be monitored in primary care, even during and after treatment offered by the specialised care or CPC. ²⁹
- In Belgium, patients also report a lack of communication between HCPs, as well as between primary care providers, specialised care providers, and CPCs. This may result in administrative issues relating to the approval of sickness funds for increased reimbursement of medicines or healthcare procedures.[Patient association]
- Currently, communication channels via health portals such as “Ma santé” or “Cozo” hinder the information exchange between HCPs due to compatibility issues between systems. Consequently, medical tests are sometimes repeated. [CPC] There is a need a communication tool for information transfer between CPC and primary care.[Personal Communication]

- **Key points:** Effective chronic pain management requires strong interdisciplinary collaboration, but gaps in communication and coordination hinder this process. Fragmented care structures, limited access to specialists, and incompatible digital systems contribute to confusion and inefficiencies. Strengthening networks between primary and specialized care, including CPCs, and improving communication tools are essential to address these challenges.

Potential actions

We found several propositions that we present below in three categories.



Working together

- An interdisciplinary network enables multimodal chronic pain management and improves patient journey⁷ and outcomes. Ng et al. propose a network structure with different expertise and length of work experience in a non-hierarchical, egalitarian structure.¹⁴ In addition, peers and colleagues are also source of informal learning.^{14, 25}
- Regularly scheduled, weekly telephone conferences among clinical team members to review patient cases, joint patient assessment or development of treatment plans at baseline have an effect on chronic pain even in primary care setting.¹⁶ As illustration, a SR of 12 RCTs showed that interdisciplinary interventions incorporating teamwork and teaming have improved patient-reported pain outcomes in comparison to usual care.¹⁶
- A data base for the professionals trained in the chronic pain management may support interprofessional collaboration.[Personal communication]
- Patient associations highlighted the need to integrate social services in the pathway for patients with chronic pain.[Patient association]

Multidisciplinary consultations with the patients

- Multidisciplinary consultations is a joint consultation involving several professionals and the patient with chronic pain, and when appropriate, with also their significant others.[CPC] Community Healthcare Centres could be a favourable place in which to provide these multidisciplinary consultations in collaboration with rehabilitation department, CPC or spine units.[Personal communication]
- The patient associations evoked also the concept of “co-consultation” whereby patients consult the psychologists and the general practitioners (GP) at the same time.[Patient association]

Improvement of the communication between health professionals

- Common language and efficient communication channel are supportive to provide appropriate biopsychosocial management of pain but also to build an efficient professional network.^{6, 14-16, 24-28} The development of a common language may be supported by the use of international classifications such as those from the WHO (e.g. the ICD, ICF and ICHI).³⁰
- In Belgium also a uniform and unambiguous language is considered as a key element to support the interprofessional collaboration.[Belgian literature^{11, 29}, Personal communication] A common language could be supported by the use of the same evaluation tools.[Personal communication] The authors of the Belgian guideline on the management of chronic pain recommend to consider the Modified Brief ICF Core Set for chronic widespread pain to promote collaboration between primary care professionals and an consistent use of language, which helps to structure clinical work.²⁹
- A report should be sent systematically to the GP after treatment by a CPC. On the one hand, the information should be summarised to be useful for primary care providers [Patient association], but on the other hand, it should be detailed enough to notify the GP about the medical assessment and provide feedback from each CPC professional.[CPC]

➤ **Key points:** Several elements can enhance interprofessional collaboration, such as a non-hierarchical network structure composed of different health and social professionals, regular scheduled contacts between professionals, joint consultations, a list of professionals with chronic pain skills, the use of a common language during information exchanges and a combination of summarised and detailed written communication.

Existing experiences

Take advantage of training opportunities to build networks among professionals

- In Belgium, an interactive map was developed and shared to improve their interdisciplinary collaboration among participants to a multidisciplinary postgraduate pain training program on HCPs knowledge, attitudes regarding to chronic pain. The targeted groups included medical doctors, nurses, psychologists, physiotherapists, occupational therapists, dentists and pharmacists. In addition, the local trainers aimed to facilitate a sustainable change by acting as a chronic pain resource person for the HCPs in the geographic areas after the implementation study.¹¹

- A training programme, provided by a CPC, has been implemented in Community Healthcare Centres with the aim of reassuring and empowering HCPs from primary care in their management of pain (see sheet HCPs training). The training event constituted an opportunity to create a local network between the CPC and Community Healthcare Centres.³¹
- There are also continuing education initiatives originating from the primary care sector. These initiatives provide an opportunity to establish networks on specific topics, such as chronic pain. The RESUMES initiative, for example, aims to organise local cross-disciplinary exchanges on specific topics or clinical cases in order to share advances in EBM and professional expertise. It started in different areas of Brussels and has now spread to Wallonia. The various RESUMES groups bring together healthcare professionals from 36 different disciplines and provide networking opportunities. The RESUMES network uses interdisciplinary communication tools (<https://www.bubblelink.com/>) and a free instant messaging system (WhatsApp group) to answer clinical questions.[Personal communication].
- In rural and regional Australian communities, the Pain Revolution project aims to provide health professionals with advanced training in pain science and education.³² This training programme enables professionals to establish a local network of health professionals specialising in pain.

Improvement of the format of communication between health professionals

- To strike a balance between usefulness and completeness, some CPC makes a telephone call to the GPs in addition to sending a full, detailed report.[CPC] Health (eGezondheid/e-Sant ) has developed an interesting solution i.e. BelRAI web services. BelRAI is a standardised digital assessment tool used to evaluate and monitor the physical, cognitive, psychological, and social needs of vulnerable people or those in complex care situations. BelRAI web services enable secure, structured data exchange between care providers, facilitating interprofessional collaboration and development care plans.

➤ **Key points:** Initiatives for the networking during training and improving the format communication between health professional are already available in Belgium.

Action points proposed for Belgium

Action point 3. Improve interprofessional collaboration.

Action point 3.1. Develop interprofessional collaboration support tools for clinical practice such as the use of standardised tools for the pain assessment, new IT (Information technology) solutions for communication, and a data base of professionals with specific skills in pain management

- The use of a common language around the patients with chronic pain should be promoted during HCPs training, for instance, by using of the same clinical assessment tools by the health professionals (see sheet HCPs training).
- In addition to existing tools (e.g. shared medical file), the development of IT solutions to support communication about patients with chronic pain in an adequate format should be added in the eHealth plan. These IT solutions should ease the communication between primary care providers, between primary care providers and CPC, and between health and social professionals.
- A creation of a database of professionals with specific skills in pain management should be established by the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE) on the basis of the portfolios of healthcare providers and with the agreement of healthcare providers. This database should be regularly updated.

Action point 3.2. Support multidisciplinary consultation between physicians, other healthcare professionals and patients with chronic pain through adequate financing (see sheet Financing).

Action point 3.3. Support integration of health and social services by developing of an integrated care program supported by an agreement protocol between federal and federated authorities.

Action point 3.4. Facilitate the interprofessional collaboration between primary care health professionals by encouraging collaborative initiatives within each care zone (regional zorgzones in Flanders, zorgzones/bassins de soins in Brussels, and organisations locor gionales de sant  (OLS) in Wallonia), through support from the federated authorities, the involvement of case manager of the care zones, and a database of professionals specialized in pain management.

Action point 3.5. Facilitate the interprofessional collaboration between primary care and specialised care (secondary and tertiary care), by designating a pain centre in each care zone (regional zorgzones in Flanders,



zorgzones/bassins de soins in Brussels, and organisations locorégionales de santé (OLS) in Wallonia) responsible for creating a transmurial interdisciplinary network that promotes experience sharing and interdisciplinary training.

- The transmurial network should include not only the other pain centres within the care zone, but also primary and specialized healthcare providers, as well as social care actors.
- This centre should be supported in its mission by (1) the database of professionals with specific skills in pain management, (2) a pathway defining the roles of each HPC/ social workers along the journey of the patient with chronic pain and (3) a dedicated budget to perform this mission.
- In addition to the initiatives from primary care, these centres should stimulate interprofessional collaboration by providing a forum for experience exchange and interdisciplinary training. These opportunities could also support the development of a common language between the different professionals.

Stakeholder feedback

Action point 3.1. Develop interprofessional collaboration support tools for clinical practice such as the use of standardised tools for the pain assessment, new IT (Information technology) solutions for communication, and a data base of professionals with specific skills in pain management.

Acceptability of this action is high but the feasibility raises some questions. Some respondents expressed doubts about the acceptability (n=3/46) of the first action point or on its feasibility (n=6/46), or declined to comment on its acceptability (n=1/46) or feasibility (n=1/46).

A general remark from the stakeholders is that the action points are not specific to chronic pain and are applicable to all care situations.

The proposition to use e-Health and data exchange is considered as challenging by the stakeholders:

- The IT solution should be user friendly and not add administrative burden.
- Criteria and roles for data exchange between professionals must be defined.
- E-Health should be improved without a special focus on chronic pain.
- Interoperability of the IT solution with BIHR (Belgian Integrated Health Record) is crucial.
- Attention must be paid to the GDPR and to the professional confidentiality.
- IT tools can facilitate collaboration but will never replace interprofessional dialogue.

The stakeholders also mention several concerns regarding the pain professional database and the information reported in the portfolios :

- The training reported in the professionals' portfolio is not a guarantee that the training is adequate and qualitative. It does not guarantee the quality of practice.
- Creating and maintaining a portfolio list presupposes validated training programs and recognized professional titles.
- There is a lack of clear criteria within Belgium regarding who treats pain and how.
- There is a lack of recognised title for pain specialists.
- Criteria should be defined to be included in the database.
- For the proposal to be acceptable, this list should not be accessible to patients.

Action point 3.2. Support multidisciplinary consultation between physicians, other healthcare professionals and patients with chronic pain through adequate financing (see Financing)

Acceptability of this action is very high and feasibility is high. Few respondents expressed doubts about the acceptability of the second action point (n=2/46) or its feasibility (n=7/46), or declined to comment on its acceptability (n=1/46) or feasibility (n=4/46).

According to the stakeholders, a multidisciplinary consultation will avoid contradictions, saves time, and gives the patient the feeling of being listened to. As the HCPs are overloaded, adequate financing could support their involvement in the process. This has already been expected for several years.



There is a comment on the necessary difference between the action point as proposed and the multidisciplinary consultation between healthcare providers, without the patient. The presence of patient appears to be important.

Action point 3.3. Support integration of health and social services by developing an integrated care program supported by an agreement protocol between federal and federated authorities.

Acceptability of this action is very high and feasibility is high. Few respondents expressed doubts about the acceptability of the third action point (n=2/46) or its feasibility (n=6/46), or declined to comment on its acceptability (n=10/46) or feasibility (n=12/46).

Indeed, the stakeholders mention several concerns regarding the integration of social services and health care:

- Social services are implemented in funded pain centres but this should also be the case in non-funded pain centres.
- Instead of a new agreement protocol between federal and federated authorities, chronic pain should benefit from a cooperation between federal government and the governments from federated entities.
- An agreement protocol should include agreement about financing.
- Integrated care should be similar in both regions to avoid chaos in Brussels.
- Integrated care should be the standard for all conditions.
- The budget constraints and the institutional complexity are barriers to develop integrated care.
- A greater access to psychological support in primary care is meaningful.

Action point 3.4. Facilitate the interprofessional collaboration between primary care health professionals by encouraging collaborative initiatives within each care zone (regional zorgzones in Flanders, zorgzones/bassins de soins in Brussels, and organisations locorégionales de santé (OLS) in Wallonia), through support from the federated authorities, the involvement of case manager of the care zones, and a database of professionals specialized in pain management.

Acceptability of this action is high but feasibility is moderate. Few respondents expressed doubts about the acceptability of the fourth action point (n=6/46) or declined to comment on its acceptability (n=3/46) whereas more on its feasibility (n=10/46), or declined to comment on its feasibility (n=6/46).

Some comments focus on the database of pain specialists and are already mentioned in the action point 3.1.

The stakeholders also mention that general practitioners are currently overloaded. Many HCPs from the primary care (such as physiotherapists and psychologists) have an independent status which offers no funding for interprofessional collaboration.

The role of case managers should be more clearly defined. Who will take this mission? Where in the care pathway.

There is a "eerstelijnszone" in Brussels.

Action point 3.5. Facilitate the interprofessional collaboration between primary care and specialised care (secondary and tertiary care)

Acceptability and feasibility of this action are moderate. Some respondents expressed doubts about the acceptability of the fifth action point (n=10/46) or its feasibility (n=12/46), or declined to comment on its acceptability (n=1/46) or feasibility (n=3/46).

According to the stakeholders, the interprofessional collaboration between primary care and specialised care (secondary and tertiary care) is challenging.

- Area of pain centres are not defined by OLS but by hospitals or even hospital network.
- HCPs from the CPCs have currently no time to involve themselves in the process.
- The model of collaboration should be defined in a national plan and supported by the decision-makers.
- The role and financing of the case managers should be defined.
- The exact responsibilities of the local pain management centre coordinator are not clearly defined.
- The criteria for the choice of the pain centre coordinator are unclear as it was the case for the funded pain centres.
- This will need times and means.
- Existing structure can help, for example meeting in LOKs-GLEMs or GLEK which could be multidisciplinary (within the first line or between lines of care)



Amended action points

Action point 3. Improve interprofessional collaboration.

Action point 3.1. Develop interprofessional collaboration support tools for clinical practice such as the use of standardised tools for the assessment of pain, new IT (Information technology) solutions for communication, and a database of professionals with specific skills in pain management.

- The use of a common language around the patients with chronic pain should be promoted during HCPs training, for instance, by using of the same clinical assessment tools by the health professionals (see HCPs training).
- In addition to existing tools (e.g. shared medical file), the development of IT solutions to support communication about patients with chronic pain in an adequate format should be added in the eHealth plan. These IT solutions should ease the communication between primary care providers, between primary care providers and CPC, and between health and social professionals. **The IT solutions should be integrated in the overall strategy to facilitate communication between healthcare professionals considering the GDPR requirements and the interoperability of the IT systems (BIHR) and should not increase the administrative burden on HCPs.**
- A creation of a database of professionals with specific skills in pain management should be established by the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE) on the basis of the portfolios of healthcare providers and with the agreement of healthcare providers. This database should be regularly updated. **Official recognition of training and professional qualifications is a prerequisite for database creation.**

Action point 3.2. Support multidisciplinary consultation between physicians, other healthcare professionals and patients with chronic pain through adequate funding (see Financing)

Action point 3.3. Support the integration of health and social services **by developing of an integrated care program supported by an agreement protocol between federal and federated authorities** including people with chronic diseases (including chronic pain) among the vulnerable persons referred to in the agreement of 8 November 2023 concluded between the federal authority and the federated entities.

Action point 3.4. Facilitate the interprofessional collaboration between primary care health professionals by encouraging local collaborative initiatives within regional territories (e.g. regionale zorgzones in Flanders, eerstelijnszone / bassins de soins in Brussels or Organisations locorégionales de santé (OLS) in Wallonia...) ~~within each care zone (regional zorgzones in Flanders, zorgzones/bassins de soins in Brussels, and organisations locorégionales de santé (OLS) in Wallonia), through support from the federated authorities, the involvement of case manager of the care zones, and a database of professionals specialized in pain management.~~

Action point 3.5. Facilitate the interprofessional collaboration between primary care and specialised care (secondary and tertiary care). **To achieve this, a geographical network should be established to correspond with the organisation of the various lines of care. Within each unit of this network, it will be useful to identify centres that are best placed and willing to carry out the tasks. ~~by designating a pain center in each care zone (regional zorgzones in Flanders, zorgzones/bassins de soins in Brussels, and organisations locorégionales de santé (OLS) in Wallonia) responsible for creating a transmurale interdisciplinary network that promotes experience sharing and interdisciplinary training.~~**

- These centres should be supported in its mission by (1) the database of professionals with specific skills in pain management, (2) a pathway defining the roles of each HCP/ social workers along the journey of the patient with chronic pain and (3) a dedicated budget to perform this mission.
- The transmurale network should include not only the other pain centres within the care zone, but also primary and specialized healthcare providers, as well as social care actors.
- In addition to the initiatives from primary care (e.g. the designation of a care coordinator as proposed by the current guideline on the multimodal management of chronic pain²⁹), these centres should stimulate interprofessional collaboration by providing a forum for experience exchange and interdisciplinary training. These opportunities could also support the development of a common language between the different professionals.



Objectives of the action points

By supporting interprofessional collaboration, it is aimed :

- To improve care coordination
- To improve patients' access to care
- To improve integration of care

Target stakeholders

- Representatives of health authorities (federal and federated entities)
- NIHDI (RIZIV – INAMI)
- Healthcare professional representative

Points of attention or required conditions

- The existing platform for information exchange between HPCs is currently not efficient.
- The consent of the patient is needed for data exchange between professionals.
- The primary care providers are already inundated.
- Harmonisation between the different regions is a challenge.
- Regional care zones in Flanders have not yet been defined; currently, only primary care zones exist.
- OLS in Wallonia are still under development.
- Brussel should be considered as one zone to avoid complexity
- The organisation of a 'pool' of case managers in each local regional structure needs a collaboration between federal government and the government of federated entities
- Tertiary pain centres encompass patients from all provinces
- The development of a transmural network by pain centre coordinators should be considered in the light of the existing (long) waiting lists
- The current funding mechanisms within the healthcare sector are still insufficiently geared towards promoting collaboration.
- The importance of a clearer definition of a pain specialist is also highlighted here.
- Each professional of the network should have at least two other HCPs as points of contact in the network to exchange about care experiences and challenges.



1.4 HCPs training

Training of professionals

Definition

The training of healthcare professionals (HCPs) encompasses initial training to obtain the elementary diploma and continuing education to ensure high-quality work. There are also specific pain training programmes for certain professions, which can be undertaken during or after the initial training.

This sheet considers all these types of training: initial training, continuing education, and specialised education in chronic pain management.

Our focus is on four groups of healthcare professionals in Belgium: physicians, nurses, physiotherapists and psychologists^b.

Background

- The multimodal management of chronic pain and the BPS approach require many competencies from healthcare professionals (HCPs) such as sufficient knowledge on pain concept, mechanism, assessment and treatment but also appropriate skills, attitudes, beliefs, emotions to be supportive and able to develop a strong relationship and therapeutic alliance with the patient. The literature review showed for example that HCPs training is mentioned as an enabler by patients since HCPs skills in neuroscience education help patients to reconceptualise pain³³ and can lead to better health outcomes during chronic pain self-management³⁴ (see chapter 3. Literature review in the [scientific report](#)).
- Insufficient training (especially at bachelor level) on multimodal management of chronic pain is broadly evoked in the literature review. Biomedical focus, lack of training in communication, deficit in psychosocial management (e.g. how to approach patient's emotions) are examples of concerns mentioned by several authors. The International Association for the Study of Pain (IASP) highlighted the lack of pain education in medical schools, as revealed by national surveys in Canada and the United Kingdom.³⁵
- During interviews, the Belgian patient associations mentioned negative attitudes of HCPs and attributed them to the biomedical perspective of their training. For example, they evoked that the medical system divided the human into parts, creating a separation between the body (soma) and the mind (psyche). It is therefore difficult to speak about emotions with the care professionals. A lack of HCPs skills in listening and understanding was also outlined.
- The Belgian HCPs interviewed during the Chronic Pain Centres (CPCs) visits highlighted the lack of knowledge on chronic pain management in primary care, particularly among older GPs and first line physiotherapists. This issue sometimes leads to counterproductive attitudes towards the BPS approach. They are also concerned by the lack of psychologists specialised in pain, specifically outside the CPCs.
- As explained in the box below, the initial HCPs training in Belgium is not optimal regarding the concept of BPS approach in pain management and can be improved. Several initiatives exist and are described in the section Existing experiences below.

Belgian situation related to the HCPs training in chronic pain management (en box)

To better understand the Belgian context regarding the training of HCPs, we conducted an Internet search for existing courses on the chronic pain management for four types of (para)medical professionals who are likely to encounter patients with chronic pain in their practice: doctors, nurses, physiotherapists and psychologists. We covered the different types of training: initial training (leading to a diploma), continuing training and specialised education in (chronic) pain management.

^b Other health professionals are also involved in the care of patients with complex and chronic pain (occupational therapists, pharmacists, dentists, etc.). This document focuses on the four health professions that are most commonly involved in chronic pain centres.

With regard to the training leading to a diploma, we searched the websites of universities and university colleges^c to see whether any course programmes mentioned chronic pain management and, in particular, the multimodal approach and/or the biopsychosocial model^d. We also searched the Internet for continuing and specialised education courses in (chronic) pain management for the four selected (para)medical professions. It should be noted that doctors and nurses are legally obliged to undertake continuing education courses (30 credits over three years and 60 hours over four years, respectively), whereas physiotherapists and psychologists are not. However, there is an 'ethical obligation' for the latter two professions to do so. The NIHDI offers financial incentives to nurses and physiotherapists who attend continuing education courses (e.g. to improve the quality of care). These obligations or incentives are not topic-specific.

The Belgian education system uses competency frameworks that specify the competencies students must acquire by the time they graduate. These frameworks facilitate student mobility within Belgium and the European Union, for example. They cover general skills and knowledge that go beyond specific topics such as pain management. As a result, chronic pain management is not explicitly addressed. However, communication with patients and within the multidisciplinary team is included in these frameworks (for nurses and physiotherapists). Each institution decides how to implement and to teach them (personal communication, ARES).

Doctors

- Chronic pain is rarely mentioned in initial medical training programmes (either at bachelor or master level^e). At UCL, however, a course is dedicated to 'Algology-chronic diseases'.³⁶ At ULB and UAntwerpen, management of (chronic) pain is mentioned as one of the studied topics^f but is not the focus of the course, and at VUB, chronic pain is a case study for clinical training (VUB).^{37, 38}
- In terms of continuing education, each professional scientific society is responsible for drawing up the annual programmes that change every year, so it is difficult to know what is on offer. However, the Belgian Pain Society (BPS) organises events, such as annual congresses and young researchers days.³⁹
- An inter-university certificate in algology for physicians is jointly organised by 7 universities: UCLouvain, ULiège, ULB, KU Leuven, the University of Ghent, the University of Antwerp and the VUB (the KU Leuven coordinates the training). The objective is "to train qualified specialists in pain control by acquiring scientific knowledge, skills and attitudes to care for patients with chronic pain". The course is organised over 2 years.⁴⁰

Nurses

- The content of the initial training programmes (and more specifically the courses and their content) is rarely available online, on the websites of nursing schools. As a result, it is difficult to know whether nurses are being taught the concepts of multimodal pain management or the biopsychosocial model.
- The programmes of continuing education vary from one year to another and it is difficult to know what is on offer.
- There are specialised training programmes to become a pain nurse. In Flanders, the organisation of these trainings varies depending on the training provider. (e.g. 1 or 2 academic years, number of days, etc.).^{41, 42} A certificate in pain management exists for French speaking HCPs, which is not restricted to nurses (see below).⁴³

Physiotherapists

- Multimodal management and/or the biopsychosocial model (or "psychology of pain") are more frequently included in initial training programmes for physiotherapists than for other healthcare professionals (doctors, nurses, psychologists): the vast majority of universities and university colleges cover with these topics.⁴⁴⁻⁵⁵
- Few training courses on pain for physiotherapists, whether as continuing education or specialised training, were found online.

^c "University colleges" refer to *Hogescholen* in Dutch and *Hautes Ecoles* in French.

^d These searches were performed in October 2024.

^e The curricula of specialised master's courses were not investigated on the Internet.

^f ULB: in the course « Unité de soins intensifs-réanimation, urgences, anesthésiologie et fin de vie-douleurs » and in UAntwerpen in the course « Anesthesie en pijn »



Psychologists

- Where information is available on university websites, the training programmes for psychologists generally include the psychosocial model, but this is not specifically related to (chronic) pain. However, no information was found online about training courses for psychologists on the biopsychosocial model or multimodal management of chronic pain.⁵⁶⁻⁶⁵

Multidisciplinary trainings

Training courses on pain designed for several categories of HCPs also exist.

- As part of the EBP project to implement the Belgian recommendations for the management of chronic pain in primary care, multidisciplinary training sessions (e-learning and face-to-face training) were offered in continuing education to general practitioners, physiotherapists, psychologists, nurses, pharmacists... More details on this project can be found below in the section Existing experiences, including the evaluation of this training.
- In specialised training, some initiatives exist. For example, the Haute Ecole Leonard de Vinci who organises the Certificate in Multidisciplinary Algology, which is a specialist education open to HCPs working with people suffering from chronic non-cancer pain (physiotherapists, occupational therapists, psychologists, nurses, physicians, etc.). The course is organised over two years.⁴³

There are a number of limitations to investigating whether multimodal pain management is taught in the curriculum and offered in continuing education or specialised education programmes for doctors, nurses, physiotherapists and psychologists. First, our aim was to present what was available at a given time; therefore, this search did not capture changes in training programmes from one year to another. In this Internet search, we also assumed that the information published online was up to date. Second, it should also be kept in mind that if an online training programme does not include the multimodal approach, this does not mean that it is not taught, and on the contrary, the mention of the multimodal approach or the BPS model in an online training programme does not necessarily mean that it is actually taught. Third, our search was limited to a few keywords (we focused on a few general concepts) and did not look for specific content on what is taught in the multimodal approach or the BPS model. Four, as we were looking for the training programmes for the academic year 2024-25, it may not be applicable to the already graduated professionals working with patients, who may have been trained in a different way previously. Our research focused on four types of professionals that are most commonly found in multidisciplinary pain teams, but other professionals may also be involved (e.g. occupational therapists, pharmacists, dentists, etc.). Finally, with all these limitations in mind, our aim was not to be exhaustive, which would have little added value compared to the energy invested in achieving it.

To our knowledge and according to the data we found, training on chronic pain and its effects have not been evaluated, with the exception of the EBP project training in primary care (see below).

- **Key points:** A multimodal approach to pain management requires both specific (pain-related) and general (e.g. communication) competencies from healthcare professionals. It is difficult to have a comprehensive overview of HCPs training in Belgium. Several initiatives exist including multidisciplinary training but initial training programmes and continuing education programmes remain limited and very heterogeneous.

Potential actions

The need for a better training of HCPs is mentioned as a key element in improving chronic pain management by all sources included in this project.

- The need for a better training of HCPs is mentioned as a key element in improving chronic pain management in several National Action Plans (Australia, Canada, Italy, USA) and by the IASP.(see sheet National Action Plan).
- In Belgium, even if a positive shift towards a more BPS approach to chronic low back pain and knee osteoarthritis management was found among physiotherapy students between 2013 and 2020, misbeliefs regarding the relationship between pain and impairment remained high (with limiting patients' activity and work participation). A variation among training institution was also observed and the institution was a contributing factor in predicting the physiotherapy students' level of biopsychosocial beliefs and guideline-adherent recommendations. These results underscored the need for additional efforts to implement the BPS model and evidence-based practice for the management of chronic pain within all physiotherapy educations.¹¹

- The Belgian patient associations requested that HCPs be trained in pain management and asked to have access to psychologists specialised in pain. They proposed that patients have access to a list of HCPs certified in pain management.
- The literature review emphasised the need of enhancing professionals' competencies, specifically in BPS approach (e.g. how to connect the biological to the psychosocial factors) and evidence-based practice, but also in effective communication and behavioural management (see chapter 3. Literature review in the [scientific report](#)). This training is required during the initial cursus and continuing education upskilling. The development of advanced practitioners to manage pain is suggested and multidisciplinary training is promoted.
- According to the research from W. Munneke in the Belgian context, educational programmes have been proven to be effective in enhancing students' biopsychosocial attitudes and beliefs. This highlights the importance of revising educational curricula to incorporate pain-related content and increasing teaching hours using pedagogical approaches. Furthermore, a national training programmes implementing similar content in all curricula could decrease the variance between training providers (university colleges or universities).¹¹
- In its updated guidelines (2024), the Belgian Working group Development of Primary Care Guidelines (WOREL) recommends organising a knowledge transfer between the first and second/third lines of care as a prerequisite to implementing its recommendations on pain management. WOREL highlighted some of the competencies that primary care professionals should acquire, such as objective-based care, patient education, motivational interviewing and professional collaboration (including the use of a common language to be consistent with the patients). WOREL also proposes regularly organising training sessions and/or support consultations with primary HCPs to facilitate collaboration among team members.⁵
- The literature review showed also that limiting teaching and training to focus solely on improving knowledge and skills is insufficient because it disregards important barriers in other domains (such as lack of confidence, role clarity and dealing with patient expectations). The need of dedicated implementation strategies (e.g. reminders, guidance, websites offering access to supporting tools as videos) is outlined as simply disseminating knowledge does not allow to successfully implement competencies in practice. Combining didactic and experiential learning over longer durations with supervision and feedback are proposed as support for the implementation. For example, adherence to the recommendations from guidelines is enabled by several features, such as: (1) compatibility with real-world practice, with individualised care, and with the former knowledge and training of healthcare professionals; (2) provision of short synthesis of evidence and global overviews of treatment options, including identification of ineffective treatments; (3) proposition of visual decisional algorithms; (4) suggestions of tools (e.g. psychosocial questionnaires) to help HCPs in their clinical decision-making. Applying guidelines can facilitate teamwork and a common language among HCPs. They can also be used to explain evidence-based practice to patients.
- Guidelines should give a quick synthesis of evidence and a global overview of treatment options (including identification of ineffective treatments) with up-to-date, useful information, decisional algorithms and suggestion of psychosocial questionnaires that help HCPs in their clinical decision making, facilitate teamwork and common language among HCPs and can be used as a tool with patients to justify evidence-based practice (see chapter 3. Literature review in the [scientific report](#)).
- The Belgian HCPs interviewed during the CPC visits (see chapter 4. The current care offer in Belgium in the [scientific report](#)) asked for a broadening of knowledge. Pain should become a more "sexy" matter to be learned by all. Training should address not only the mechanisms, assessment and management of pain, but also topics such as time for referring the patient to the second/third line, disability issues and return to work. Some concrete suggestions were formulated:
 - Include algology course in the 3 years of general medicine training.
 - Provide basic and ongoing training for HCPs that is not just theoretical but including positive reinforcement through peer learning session (e.g. 1x/month). This training should come neither too early nor too late in the course and should not be given in large auditoriums but should instead allow for discussions in small groups. One example is given by the ISEI, where nurses in training in their 3rd year have a day on pain (given by the St-Luc multidisciplinary team) with the afternoon devoted to workshops to discuss complicated situations.



- Encourage interdisciplinary training during the initial cursus but also at local level if possible, during the continuing education.
- Use pilot projects (such as the project with Community Healthcare Centres described in the section Existing experiences below) to develop local champions enable to train other HCPs.
- Create a team of mobile trainers to be shared between different universities and university colleges.

➤ **Key points:** All sources (literature, Belgian guidelines, Belgian researchers, HCPs from CPCs and patient associations) highlighted the need to improve the training of HCPs, both during their initial programmes and as continuing education. Some actions are proposed to the training providers such as to focus on evidence-based practices, develop competencies in pain management including communication, patient education, motivational interviewing, pain-validation⁹ and professional collaboration, combine didactic and experiential learning, promote multidisciplinary sessions, use positive reinforcement through peer learning session, provide realistic recommendations, practical tools and reminders. The development of mobile trainers teams is suggested. Patient associations asked for a list of HCPs certified in pain management.

Specific stakeholders consultations

We organised several consultations (in French or Dutch) with stakeholders responsible of HCPs training to identify the barriers to integrating the BPS model into the training in chronic pain management of HCPs (initial and continuing training) and the possible solutions to overcome these obstacles. Specialised training was not deeply discussed by the stakeholders.

Several HCPs, teachers and academic professionals with different levels of knowledge and/or experience in chronic pain management participated in group interviews (e.g. pain nurses, academic teachers or teachers from university colleges, whether they teach a chronic pain course or not, and representatives of professional organisations).

The stakeholders consultations reported that the training of chronic pain management and the BPS model are relevant to several domains, including healthcare, education and society. However, it was also observed that the biomedical model remains firmly anchored in society. This has consequences for patients, who may be led to believe that it is the only and best model by receiving incorrect information. It also has consequences for internship supervisors, who educate future HCPs in this single view, and for HCPs, who lack education on the BPS model.

The stakeholders mentioned several collaborative educational initiatives that have been implemented, such as interdisciplinary seminars in initial and continuing education, and the introduction of innovative educational tools.

Some of the reported barriers are useful for understanding the context, even though they are beyond the scope of integration the BPS model into training. For example, practical guidance on applying the BPS model, such as guidelines, was lacking in practice, as was financial support for developing a more integrated and interdisciplinary approach to patient care, which requires reform of the healthcare system.

The barriers mentioned by the stakeholders (SH) to integrating chronic pain management and the BPS model into training were the following:

1. Initial training

- Education programmes are decided by each institution, through Education Committees. While there is a skills reference framework that sets out the main points to be followed in each degree programme (whatever the institution), it covers concepts that are broader than the management of chronic pain.
- The courses are organised without interdisciplinarity between the programmes of the future HCPs. The education on the BPS model is poorly integrated in the cursus. Moreover, there are few, if any, courses shared by different disciplines, whereas the BPS model calls for interprofessional collaboration to be developed around patients.
- Courses are organised according to disease systems rather than by type of complaint (e.g. chronic pain).

⁹ "To validate an individual's feelings or behaviour is to sanction their thoughts or actions as worthy of social acceptance and support"⁶⁶.

- Each lecturer decides on the content as an expert in the field. Often, there is no consultation between teachers within the same degree programme.
- Adding a new subject to the curriculum is challenging because course loads are already high and many requests are made to include new subjects.
- Ensuring long-term knowledge acquisition comes through practice; however, internships are often in contexts where the biomedical model predominates.
- The large number of students exacerbates the above-described barriers: interdisciplinarity, system-based learning and learning that incorporates a large number of practice hours are all more difficult to implement when the number of students is large.
- Specifically with regard to health psychology, students find that this professional field (supporting patients with chronic pain) is far removed from the initial interest that led them to begin their studies.

2. Continuing education

- Healthcare professionals must first recognise that they need training in chronic pain and then allocate time for it.
- Resources such as time and money to attend training may be lacking.
- With regard to training for doctors, a lack of inter-university collaboration in organising continuing training courses has been noted. According to the universities, there is insufficient funding to develop the courses they would like to see on the programme.
- Given the existence of chronic pain centres, HCPs may not feel responsible for managing pain themselves, as they tend to refer patients to the centres. As a result, they may be reluctant to engage in training on pain management.
- There is not always interdisciplinarity in continuing training courses on chronic pain, even though the BPS model requires interdisciplinarity.

Solutions to overcome these barriers and include chronic pain management and the BPS model into the education and training of HCPs were also discussed. Some of these solutions were reported regardless of the level of training (initial or continued):

1. Initial and/or continuing education

- The training should be practical and promote a person-centred approach. For example, discussions with patients about yellow flags could help students to recognise them in their practice.
- Social services can be involved to emphasise the trainees that the main goal is reintegration rather than pain elimination.
- At all levels of training, HCPs should be encouraged to learn about the roles of the other HCPs, so that they can collaborate effectively in providing care for patients with chronic pain. Financial incentives could encourage training on collaborative ways of working. Communication options and tools should be investigated to facilitate efficient collaboration. The SH have presented several initiatives (e.g. “integrated casuistry” based on a case study approach taught in groups, discussions of cases by students from different disciplines, collaboration of students from different disciplines on a health and well-being project, Life Labs where elderly residents ask questions about their well-being and healthcare students and clinical psychologists students form multidisciplinary teams to answer the questions).
- Stimulate learning by using a variety of teaching tools is proposed. There are for example peer support, collaboration with expert patients or patient partners, interdisciplinary e-learning modules, courses led by professionals from other disciplines, webinars, video capsules or the simulation-based learning laboratory (SimLabS) for healthcare professions (ULB),.
- The message around chronic pain management should be consistent and aligned across healthcare disciplines and levels of training (initial and continued), as well as inside each bachelor's degree. The guidelines on chronic pain management should be publicised more widely and included in training course programme.
- Training should include patients, for example through testimony or patient experts.
- Pathophysiology should be addressed repeatedly and in multiple courses.



- Evaluation of the training (all levels, from initial to specialised training) must be encouraged.
- A multidisciplinary research policy should be supported (see Data collection and research).

2. Initial training

- Encourage each faculty to create a course register detailing the content taught to students. This will ensure that a course on the management of chronic pain/BPS model is included in the initial training curriculum. Teachers should then consult each other on what is actually taught.
- Appoint a 'chronic pain' coordinator for each faculty/institution to ensure that chronic pain and multimodal management are included in the education programme.
- Define a curriculum for teaching chronic pain via a multidisciplinary think tank of experts. Curriculum have been developed (EFIC, IASP) and can be used as a starting point. Training should be standardised across disciplines and include the latest guidelines.
- In some educational institutions, experts in pain can be invited to teach to future HCPs.
- Add chronic pain to the 'Dean's Minimums' in medicine and develop this approach in other HCP training programmes. The 'Dean's Minimums' are agreements between the deans of FWB universities with a medicine curriculum on the subjects to be covered and at what level in the curriculum, in order to allow inter-university mobility of students.
- Promote interdisciplinarity in teaching through coordination between faculties and the university as a whole. This could be organised via interdisciplinary training days between faculties/institutions that train HCPs, using patient clinical vignettes (existing initiatives).

3. Continuing education

- List the existing training courses on chronic pain and, if necessary, develop (specialised) continuing education in pain management.
- Using a task force, develop a tool for HCPs on the management of chronic pain to improve their knowledge and patient management skills. Content of the training should be harmonised among the several institutions and offers of training.
- To encourage continued education throughout one's career, specific recognition should be provided for HCPs (especially those working in pain centres), and the accreditation system should be expanded. Access to continuing education should be facilitated, and innovative forms should be proposed to make them more accessible, e.g. online courses, low cost webinars. However, the system should encourage HCPs rather than making the training mandatory.
- After-training offerings should be expanded, through local initiatives for example (additional on-the-job training or practice days to provide practical training).

For these solutions to be effective, prerequisites must be met, such as raising awareness among (future) HCPs of multimodal chronic pain management and changing the current culture, which is focused on the biomedical model. Awareness of the HCP could be developed since the initial education. Public awareness campaigns would also help to create a favourable environment in which to teach this subject (see sheet Public awareness). The healthcare system should also be reformed to support the implementation of the BPS model in clinical practice, with financial support provided for training opportunities and a multidisciplinary approach around the patients.(see sheet Financing)

From university colleges onwards, students should also be educated about chronic pain and its specificities. To achieve this, teachers should be provided with the appropriate educational materials on pain and taught how to use them effectively. Awareness of chronic pain and how to deal with it should be raised, including the role of psychological factors and how to remove stigmas. Resources for training in neuroscience could be found in the KU Leuven Brain Institute (<https://www.kuleuven.be/brain-institute/training-education/index.html>).

- **Key points:** Belgian stakeholders responsible of training reported several barriers to integrating the BPS model and chronic pain management into HPCs' training, including dominance of the biomedical model, lack of interdisciplinarity, and limited access to practical, patient-centred education. They also mentioned some solutions or initiatives such as promoting consistent curricula, interprofessional training, involvement of expert patients, development of national guidelines, and support for innovative, accessible learning formats. Implementing these solutions require cultural and structural changes, financial support, early awareness-raising (starting in secondary education), and broader public engagement to foster understanding and acceptance of the BPS approach.

Existing experiences of trainings in chronic pain management (initial, continuing and specialised)

As mentioned in the Background section, training programmes on pain management (initial, continuing and specialised) exist for doctors, nurses, physiotherapists and psychologists in Belgium. Specialised trainings such as the Interuniversity Certificate in Algology (jointly organised by 7 universities), the University College Certificate in Multidisciplinary Algology and the Nursing Pain training are described above in this document. In this section, we focus on training on chronic pain management and interprofessional collaboration in Belgium as this is crucial for changing the perspective of all HCPs. We therefore present the evaluation results of the training sessions organised as part of the EBP project which aimed to implement the Belgian recommendations for chronic pain management in primary care (see above).⁶⁷ We present other Belgian initiatives that have been identified by stakeholders and experts as attempts to train HCPs in interdisciplinarity practice and communication. Finally, we provide examples of training in pain management from Australia, France, and Italy.

1. Belgium

Multidisciplinary training on chronic pain in HCPs continuing education

- The multidisciplinary training sessions of the EBP project in primary care were organised in French or Dutch and consisted of two e-learning sessions and two days of face-to-face training. The training programme was based on a preliminary work of an interdisciplinary expert panel created to identify the barriers and needs of stakeholders. (see chapter 4. The current care offer in Belgium in the [scientific report](#)) The main objectives of the training were to improve understanding of pain from a BPS perspective, assess patients with chronic pain, incorporate the latest knowledge on the neurophysiology of pain, implement targeted patient-specific strategies, and expand participants' professional network.⁶⁸ A variety of educational methods, such as interactive lessons, video materials, local opinion leaders, demonstrations, illustrations, assignments, skills training, clinical reasoning training, goal settings, role-playing, case studies and interdisciplinary discussions, and peer- and teacher feedback to improving the learning process. Patient materials (posters, booklet and videos) were developed to support the integration of the biopsychosocial model in clinical practice and the quality of pain science education for patients with chronic pain. Each training session was led by a pair of teachers: one expert teacher and one local expert, both of whom had completed a train-the-trainer workshop. All HCPs were invited but the recruitment was prioritised for specific groups in primary care (general practitioners, nurses, psychologists, physiotherapists, occupational therapists, dentists, and pharmacists). Five areas (Antwerp, Ghent, Brussels, Liège and Namur) were prioritised. Registration was free. This training was evaluated in terms of its implementation⁶⁹, as well as the short- and medium-term changes in knowledge and attitudes towards pain, and adherence to guidelines (e.g. continuation of physical activity, sports, work, avoiding bed rests, and not supporting opioid usage). Knowledge and attitudes towards pain and adherence to guidelines improved among the 405 participants at the end of the training and six months afterwards.⁶⁹ This training was organised as a single event. As the impact of the training marginally declined overtime, the need for long-term support (e.g. follow-up courses, peer support or self-directed learning) and research for refining training programmes (in terms of content, methods, duration...) were evoked.¹¹
- A training aiming to reassure and empower HCPs from primary care in their management of pain has been implemented at Community Healthcare Centres. A first project began with a small group of motivated HCPs from four centres. Six peer learning sessions were organised, combining the sharing of clinical experience with theoretical enrichment on pain. This format was appreciated (according to eight HCPs interviewed) since it enabled a better understanding of complex cases and, it also helped to manage the negative emotions associated with caring for demanding patients.³¹ A second project is currently underway with almost all the HCPs from two centres. It follows a structured peer learning session methodology consisting of 2-hour meetings once a month. The first session is a theoretical introduction to the psycho-educational model for patients with chronic pain, followed by a round-table discussion to develop collective intelligence (facilitation, clarification, avenues to explore and brief theoretical explanations if necessary). A qualitative evaluation is planned and expected in 2026



Training in interprofessional collaboration during initial HCPs education

- The provision of training in interdisciplinary collaboration in medicine varies between different academic institutions, ranging from simple seminars or themed days to more comprehensive and progressive training throughout the curriculum. The University of Liège, for instance, offers such progressive training. This approach is initiated in the third year of the Bachelor of Medicine degree, with joint teaching taking place alongside students in first-year Master's physiotherapy on the clinical examination of the musculoskeletal system during semiology classes. Second-year Master's students in medicine and final-year students in physiotherapy, pharmacy, psychology, general nursing and advanced practice nursing participate in interdisciplinary conversation tables. The purpose of these tables is to practise active listening, transmitting synthetic information, collaborating and co-constructing interdisciplinary intervention plans.
 - In the first year of the Master's degree specialising in general medicine, the study of interprofessional collaboration continues through the acquisition of knowledge regarding the functioning and structure of the healthcare system. This is followed by the practical application of effective interprofessional collaboration practices from functional and normative perspectives, with final-year nursing, physiotherapy and midwifery students.
 - In the second year of the Master's degree in General Medicine, roundtable discussions are organised with professionals from six different disciplines: namely, pharmacists, physiotherapists, nurses, care coordinators, social workers and psychologists.
 - Finally, third-year Master's students in general medicine further develop their professional collaboration skills through role-playing scenarios involving general practitioners.

In order to implement such a progressive learning approach, which is largely based on a participatory approach, two enablers were identified. Firstly, large buildings are required to allow the distribution of a large number of students (several hundred) into small discussion groups. Secondly, it should be noted that students may be at different levels of advancement depending on their specific disciplines.

Training in communication during initial HCPs education

- In addition to interprofessional collaboration, which is a common feature of medical education, communication skills are also taught to some students. At ULiège, for example, communication is taught at different stages of the programme. In the third year of the bachelor's degree programme, students take a course in communication and patient education, consisting of theoretical teaching supplemented by practical work. Subjects covered include the therapeutic relationship/alliance, the patient-centred approach, the Calgary-Cambridge model⁷⁰, motivational interviewing techniques, the importance of empathy, how to react in various clinical situations, psychological/cognitive behavioural care, therapeutic education and education on the neurophysiology of pain for chronic pain patients. These concepts are then explored in greater depth in the second year of the master's programme. The first course focuses on therapeutic communication in sports physiotherapy, while the second focuses on psychosocial aspects and the therapeutic relationship. Finally, there is a specific module on pain communication, which addresses communication about persistent pain for patients with chronic pain. (Personal communication)

2. Australia

- As an example, we examined the approach developed in Australia, due to their valuable experience in chronic pain management. In 2023, the Australian and New Zealand College of Anaesthetists published the "Australian national strategy for health practitioner pain management education". This document is part of the National Strategic Action Plan for Pain Management, which is a nationally coordinated effort in Australia to improve care for people living with chronic pain (see sheet National Action Plan).⁷¹
- This educational strategy was designed as a roadmap and aimed to improve the quality and consistency of Australian health professionals' knowledge, attitudes, and skills in pain management. It had several objectives covering the following topics: developing national standards for pain management education for health professionals, developing a national competency/skills/practice framework for pain management education, developing educational resources that align with the standards and competency framework, embedding pain management education in entry-to-practice curricula, and equipping educators to deliver pain management education. An implementation plan over 5 to 10 years was also developed.

- The Australian national strategy for health practitioner pain management education acknowledged the following key elements regarding training of chronic pain at the international level⁷¹:
 - Pain management education is inadequate across healthcare professional disciplines at every career stage, and according to the IASP there is “insufficient pain content in entry-to-practice curricula and a lack of continuing professional development opportunities related to pain”
 - When pain content is included in entry-to-practice curricula, it is often not fit-for-purpose and “pain is often taught using a biomedical lens, with less time given to topics that would help learners understand a biopsychosocial approach to pain management”
 - Registration and accreditation standards rarely stipulate competency in appropriate pain assessment and management
 - There is inadequate published evaluation of what works in pain management education across learning stages, specifically in relation to patient outcomes
 - There are pain management education ‘centres of excellence’ across the world, but limited evidence for a coordinated response in any country.

3. France

- During interviews with Belgian HCPs in CPCs, training in pain management in France was reported. In fact, several French universities offer an (inter-)university degree in pain management (e.g. Université de Lille, Paris Cité, Sorbonne, Montpellier, Nantes, Reims, Lille, Valenciennes...). The University of Lille, for example, provides HCPs involved in the care of patients suffering from pain with practical and theoretical training. This training provides high-quality information on the therapeutic approaches and high-level scientific concepts that take into account the latest advances in pain psychopathology research. It also enables clinicians to analyse complex pain situations and devise appropriate therapeutic strategies. Furthermore, it encourages the development of psychological, multidisciplinary and interdisciplinary thinking through practical training based on reflection, exchange and confrontation with daily clinical practice.⁷² No evaluation of this training was found.

4. Italy

- In their article, Violini et al. (2025) discussed chronic pain management in Italy. They suggested that various degrees of expertise in the treatment of chronic pain should be recognised, as also foreseen by the European Pain Federation (EFIC) (see below). They highlighted some barriers relating to HCPs training and possible solutions to address these issues. These solutions are listed below.⁷ While they relate to medical education, they could also be applied to other HCPs.
 - Make pain medicine a compulsory subject in medical training programs (bachelor and master);
 - Ensure comprehensive university-level pain management training nationwide;
 - Create a national training programme based on identified skill needs in pain medicine;
 - Establish master’s degrees or specialty programs focused on chronic pain;
 - Establish postgraduate training in pain diagnosis and management across specialties
 - Promote continuous education and lifelong learning for chronic pain professionals;
 - Diversify curriculum to include pharmacological and nonpharmacological therapies for chronic pain;
 - Involve expert pain manager specialists for comprehensive chronic pain training across medical, legal, and economic domains;
 - Develop targeted training on oncological, musculoskeletal, and lumbar pain, including invasive analgesic techniques;
 - Personalise training by proficiency and professional interests;
 - Expand clinical experience opportunities (e.g. internships and peer-to-peer activities) in chronic pain care;
- Broaden chronic pain training to include more medical specialties to foster cross-disciplinary competence.⁷



- **Key points:** Several experiences of training in chronic pain management were identified, covering the following three levels: initial, continuing and specialised education. In Belgium, we identified projects in primary care on chronic pain management, interprofessional collaboration or communication. HCPs knowledge, attitudes, skills and compliance to pain management guidelines have been improved due these initiatives.

Proposed guidance

To build these actions, the IASP and EFIC can be sources of guidance.

1. IASP

In its "Prospectus to Promote Professional Pain Education", the International Association for the Study of Pain (IASP) presents the strategies to support change in professional education. These strategies are listed below⁷³:

- Lobby professional regulatory, accreditation, and professional bodies to include pain assessment requirements in any entry-to-practice requirements.
 - Identify colleagues and other networks that can help lobby key stakeholders at all levels
 - Involve students and consider their feedback about the lack of pain content in any negotiation and proposals
 - Include advocacy groups in the development process and in meetings at all levels
- Work with colleagues from other disciplines to achieve consensus and provide a unified voice that pain curriculum reform is long overdue.
- Strengthen partnerships between academic and clinical educators who have a shared responsibility for teaching and modelling best pain care practices for students.
- Refer to resources from international and national pain societies that include current statistics and models of successful approaches by region.
- Provide leadership for a national consensus project to advance implementation of pain core competencies in your profession.
- Attend pain society meetings and encourage an education focus for meeting content and projects.

2. EFIC

As a source of inspiration, EFIC proposes an interprofessional approach to pain education. It has developed curricula on pain medicine, pain physiotherapy, pain nursing, and pain psychology.⁷⁴ EFIC also organises an annual congress as part of continuing education for HCP, and offers EFIC Academy, an online educational platform designed to provide high-level training to HCP through e-learning and webinars, among other resources.

- **Key points:** IASP and EFIC highlight the importance of interprofessional collaboration, curriculum reform, and continued professional development through structured training programmes, advocacy, and access to specialised educational resources.

Action points proposed for Belgium

Domain of action. Improve HCPs training

Action point 4.1. Define the curriculum content for chronic pain management in initial and continuing HCPs education programmes, which implies:

- To establish a specification by discipline of what must be taught at each stage of initial and continuing education;
- Enhance integration of evidence-based content into curricula, including clinical practice guidelines, the latest scientific recommendations, resources from EFIC, IASP, and approaches such as "Explain Pain";
- To stimulate collaboration between teachers and between faculties, universities and university colleges.

Action point 4.2. Develop tools and pedagogical supports for initial and continuing education to enhance HCP multimodal competencies

- Identify and implement pedagogical tools to support the teaching of transversal competences, such as patient communication, interdisciplinary collaboration... There are existing initiatives in Belgium that can be used as inspiration.
- Promote collaboration among healthcare professionals during training.
- Provide opportunities for continuing professional development.

Action point 4.3. Develop appealing training programmes, using innovative pedagogical approaches and flexible formats to promote participation

- Integrate theoretical knowledge with practical training.
- Implement positive reinforcement through peer-to-peer learning training.
- Encourage multidisciplinary sessions by integrating students from various disciplines and, where possible, at different stages of their education. Ensure to repeat the training on pain throughout the training curricula.
- In initial training, promote collaboration at multiple levels to ensure a consistent and multidisciplinary approach:
 - Collaboration between teachers from the same discipline (e.g. medicine faculty) to ensure curricular consistency (e.g. through a registry of pain-related courses or the appointment of a “pain coordinator”);
 - Interdisciplinary collaboration between teachers in health care and social care to foster multidisciplinary education;
 - Educational institutions collaboration, to deliver a consistent message and standardise educational content.
- In continuing education, involve professional associations and existing training organisations to broaden the training offer.
- Develop a practical, up-to-date tool compiling the latest evidence and guidelines in chronic pain management, enabling HCPs to consult it as needed during practice.
- Identify and integrate into training programs existing tools and strategies, such as regional opinion leaders, simplified access to evidence-based resources, involvement of expert patients, case discussions, self-directed learning, etc.
- Inventory promising initiatives as sources of inspiration.
- Establish a list of specialised teachers (e.g. from CPCs, algology teams...) to facilitate access to expert-led training. A mobile team of teachers could be an enabler to support certain educational institutions.
- Promote training by supporting all HCPs with accreditation points and financial incentives (to follow the training and to implement BPS approach in clinical practice).

Action point 4.4. Promote specialised pain training to address the shortage of such specialists in primary care (e.g. psychologists)

- Increase the number of HCPs trained in pain management.
- Develop a registry of HCPs specialised in pain management, accessible to HCPs (see Interprofessional collaboration) and patients.

Action point 4.5. Evaluate the impact of all training programmes in the short, mid and long term, for both HCPs competencies and patients outcomes, using diverse methods to obtain a comprehensive overview of these impacts (see Data collection and research).

Action point 4.6. Support future educational research on (see Data collection and research) :

- the role of content, number of hours and years of education, targeted competency level, etc on students'/participants' attitudes, beliefs and clinical decision-making;
- the influence of personal factors, such as cultural and social factors on students'/participants' learning curves to identify which factors hinder or encourage the development of biopsychosocial attitudes and beliefs of students.

Stakeholder feedback

During the consultation, at least three-quarters of the stakeholders considered the six proposed action points for HCPs training to be acceptable and feasible. However, some respondents expressed doubts about the acceptability of the fifth action point (n=6/47) or its feasibility (n=7/47) (evaluating the impact of training), or



declined to comment on its feasibility (n=7/47). Some respondents deemed the sixth action point (relating to pedagogical research) “rather unacceptable” (n=7/47) or unrealistic (n=2/47), while other (n=10/47) had no opinion on its feasibility.

Stakeholders confirmed in their comments the barriers (time, resources, recognition) and enablers (existing experiences and initiatives, international associations) previously identified in the literature and during consultations with training professionals. There is a clear need to increase knowledge about chronic pain management, and multidisciplinary work is essential. This should be introduced as early as initial training.

The connection between theoretical knowledge and clinical practice should be strengthened; in this context, expert patients could be involved in the development of training programmes.

The need for a formal professional title was raised by several respondents, particularly in relation to the establishment of a registry. The role of multidisciplinary pain teams within hospital settings was also highlighted; this could be further reinforced as part of the training of hospital-based healthcare professionals.

Comments regarding the training evaluation fell into two main categories: on the one hand, the recognition of the need for evaluation in order to adjust and improve training as necessary; on the other, the view that evaluation is not currently a priority, as such processes can be time-consuming, uncertain, and costly.

These points have been addressed as points of attention.

Some stakeholders' comments led to the following changes in the action points:

- Stakeholders stressed to build the content of the curriculum on existing resources rather than starting from scratch. Point 4.1 has been amended accordingly.
- The role of professional associations is highlighted in the provision of continuing education (action point 4.2.).
- For continuing education, strengthening collaboration between academic centres and professional associations has been added, as well as the possible role of a continuing education organisation bringing together several healthcare disciplines (action point 4.3).

Amended action points

Domain of action. Improve HCPs training

Action point 4.1. Define the curriculum content for chronic pain management in initial and continuing HCPs education programmes, which implies:

- to establish a specification by discipline of what must be taught at each stage of initial and continuing education;
- enhance **what already exists and integrate** evidence-based content into curricula, including clinical practice guidelines, the latest scientific recommendations, resources from EFIC, IASP, and approaches such as “Explain Pain”;
- to stimulate collaboration between teachers and between faculties, universities and university colleges.

Action point 4.2. Develop tools and pedagogical supports for initial and continuing education to enhance HCP multimodal competencies

- Identify and implement pedagogical tools to support the teaching of transversal competences, such as patient communication, interdisciplinary collaboration... There are existing initiatives in Belgium that can be used as inspiration.
- Promote collaboration among healthcare professionals during training.
- Provide opportunities for continuing professional development (**e.g. by professional associations**).

Action point 4.3. Develop appealing training programmes, using innovative pedagogical approaches and flexible formats to promote participation

- Integrate theoretical knowledge with practical training.
- Implement positive reinforcement through peer-to-peer learning training.
- Encourage multidisciplinary sessions by integrating students from various disciplines and, where possible, at different stages of their education. Ensure to repeat the training on pain throughout the training curricula.

- In initial training, promote collaboration at multiple levels to ensure a consistent and multidisciplinary approach:
 - collaboration between teachers from the same discipline (e.g. medicine faculty) to ensure curricular consistency (e.g. through a registry of pain-related courses or the appointment of a “pain coordinator”);
 - interdisciplinary collaboration between teachers in health care and social care to foster multidisciplinary education;
 - educational institutions collaboration, to deliver a consistent message and standardise educational content.
- In continuing education, involve professional associations and existing training organisations to broaden the training offer; **this involves to reinforce collaboration between academic centres/university colleges and professional associations.**
- Develop a practical, up-to-date tool compiling the latest evidence and guidelines in chronic pain management, enabling HCPs to consult it as needed during practice.
- Identify and integrate into training programs existing tools and strategies, such as regional opinion leaders, simplified access to evidence-based resources, involvement of expert patients, case discussions, self-directed learning, etc.
- Inventory promising initiatives as sources of inspiration.
- Establish a list of specialised teachers (e.g. from CPCs, algology teams...) to facilitate access to expert-led training. A mobile team of teachers could be an enabler to support certain educational institutions.
- Promote training by supporting all HCPs with accreditation points and financial incentives (to follow the training and to implement BPS approach in clinical practice).

Action point 4.4. Promote specialised pain training to address the shortage of such specialists in primary care (e.g. psychologists)

- Increase the number of HCPs trained in pain management.
- Develop a registry of HCPs specialised in pain management, accessible to HCPs (see sheet Interprofessional collaboration) and patients.

Action point 4.5. Evaluate the impact of all training programmes in the short, mid and long term, for both HCPs competencies and patients outcomes, using diverse methods to obtain a comprehensive overview of these impacts (see sheet Data collection and research).

Action point 4.6. Support future educational research on (see sheet Data collection and research) :

- The role of content, number of hours and years of education, targeted competency level, etc on students'/participants' attitudes, beliefs and clinical decision-making;
- The influence of personal factors, such as cultural and social factors on students'/participants' learning curves to identify which factors hinder or encourage the development of biopsychosocial attitudes and beliefs of students.

Objectives of the action points

Improving the training of HCPs will address the following issues:

- HCPs' lack of competencies to use an approach incorporating all components of the BPS model (knowledge, skills, beliefs, attitudes)
- HCPs' lack of understanding modern pain science
- HCPs' iatrogenic attitudes
- HCPs' misunderstanding and/or not following of clinical guidelines
- Lack of knowledge of other HCPs role / interdisciplinarity / responsibilities
- HCPs' stress, frustration and other negative feeling, and difficulties to know their professional identity, their role and boundaries in their missions.

It will ultimately improve the quality of care and accessibility of care and reduce the risk of chronicity in patients with subacute pain, as well as improve the collaboration between patients and HCPs.



Target stakeholders

- Universities and university colleges representatives
- HCPs organisations
- Federated entities
- FOD VVVL-SPF SPSCAE
- NIHDI (RIZIV-INAMI)
- Patient associations

Points of attention or required conditions

- Integrating chronic pain management into training programmes (or strengthening/standardising it) requires human and financial resources, time, and strong institutional commitment to ensure sustainability and to remove the barriers that currently hinder effective collaboration. The time spent organising and/or coordinating the training sessions, as well as the time spent participating in them, must be properly acknowledged.
- There are many organisations that can be involved in HCPs training (e.g. ICHO for GPs); some of them have already materials on chronic pain (e.g. Domus medica and SSMG).
- The role of experts in the field (e.g. HCPs treating patients, expert patients/patient partners) should be reinforced, both in developing training materials and participating across all levels of education (initial, continuing, and specialised), to better align theory with practice.
- A continuing education organisation that includes various healthcare disciplines could contribute to develop training programmes.
- Establishing certification and formal professional recognition for HCPs specialised in chronic pain management should be explored; the way to achieve this has to be discussed (e.g. portfolio). This is also linked to the action point of creating a registry. Key considerations here include who would have access (e.g. patients, HCPs) and the purpose of the registry (e.g. geographic coverage, accessibility). Such a registry would require continuous coordination and management.
- HCPs who have received enhanced training in pain management could take on the role of 'community pain champion', using a coaching approach to empower community-engaged workers under their supervision.
- HCPs should have basic skills in pain neuroscience education; they do not need in-depth pain science expertise, but enough understanding to integrate biomedical principles within the biopsychosocial model rather than treating them as separate or conflicting.
- Future HCPs should be made aware of unconscious bias in communication, pain assessment and treatment regarding minorities⁷⁵⁻⁸⁰, social status⁸¹ or genders⁸².

1.5 Public awareness

Increase public awareness by media campaigns and information in school

Definition

One major challenge in the pain management is the lack of understanding of pain throughout society. Misconceptions and unhelpful beliefs about (persistent) pain are widespread and they foster thoughts and behaviors that are inconsistent with current scientific insights into pain and modern pain management. Raising public awareness of the biopsychosocial model should lead to a significant change in people's perception of pain, shifting the focus from an apparent threat to a compelling perceptual experience generated by the brain. This experience will only arise when there is more evidence of potential danger to the body than evidence of potential safety.⁸³

Two axes are proposed in this sheet to sensitize the public: the organisation of media campaigns and the sensibilisation of children and adolescents in school.

- A media campaign targets the population level using mass-distribution media, which may include posters, leaflets, newspapers, television, radio and the Internet.⁸⁴ Awareness campaigns generally involve numerous public and private partner organizations, each able to reach different segments of the population, use multiple media (including entertainment and social media), and require careful planning, research on audience segments' attitudes and beliefs and receptivity to test messages, and evaluation. (https://www.ninds.nih.gov/sites/default/files/documents/NationalPainStrategy_508C.pdf)
- Children sensitization consists here on pain science education as a preventive strategy.⁸³ We focus on healthy children or adolescents in order to prepare tomorrow's adults to better manage their (everyday) pain. Paediatric patients are indeed out of scope of this study.

Background

- The multimodal management of chronic pain implies a paramount paradigm shift from the biomedical model towards the biopsychosocial approach. The persistence of the biomedical culture in patients and society is a source of stigma, misunderstanding or false belief in chronic pain.(Ng) This hampers the optimal (self-)management of chronic pain.
- The Institute of Medicine (IOM), now called National Academy of Medicine (NAM), considered education central to a cultural transformation in pain care and recommended expanded and redesigned programs aimed at increasing public and patient understanding of pain. (https://www.ninds.nih.gov/sites/default/files/documents/NationalPainStrategy_508C.pdf)
- In some countries, the National Action Plan emphasises the importance of public awareness and recommends to invest in educating the population on pain (AU, US, DK, IT), for example, through media campaigns. Importance of health promotion is also emphasised. The International Association for the Study of Pain (IASP) recommended to include public pain education in any strategy to improve pain management (see sheet National Action Plan).
- In Belgium, several media campaigns have already been developed these last years in the health domain focusing on topics such as imaging, mental wellness at work and antibiotics. These examples are presented below in the section Existing experiences.
- A number of educational tools exist in Belgium for patients such as for people suffering from low back pain (<https://lowbackpain.kce.be/>), but no significant broader public initiative using pain neuroscience education (PNE) to raise awareness of chronic pain has yet been launched.
- Regarding the healthy children and adolescents education, no specific program focusing on pain is currently available in Belgium.

➤ **Key points:** Public education in pain is considered as crucial by many authorities abroad who recommend including it in any strategy for improving pain management.

Potential actions

- In the literature review, awareness campaign is proposed as one possible intervention to change the society culture and engage health system decision makers in supporting comprehensive chronic pain management (in prioritisation, resource allocation, reorientation of funding models, training programs or research).^{6, 14} A variety of advocacy approaches can be used for public engagement such as traditional



media (print, radio and television) or 'new media' (mass short messages (MSMs) and other mobile phone-based strategies, as well as online petitions and other internet-based approaches).⁶ Some barriers to advocacy campaigns are identified such as competition between different topics for the attention of the general public and the resources of health system decision-makers.

- Belgian patient associations emphasised the need of public information. They asked for TV and newspapers involvement to explain BPS approach. They considered that informed patients could be better prepared for encounters with healthcare professionals (HCPs), allowing them to be more assertive and interactive, and feel more empowered. They also highlighted that a media campaign aimed at the general public could be useful for informing families and colleagues. They suggested developing a type of advertising for health, similar to that against psychotropic drugs, but against painkillers. Public campaigns on stress (and how to reduce it), on lifestyle (including diet), on physical exercise could also support prevention of chronic pain. More effort should be put into raising population awareness to move more (starting already in schools).
- Belgian chronic pain centres (CPCs) confirmed the lack of patient knowledge regarding chronic pain, lifestyle (e.g. importance of physical activities), or the BPS approach. Patients take a biomedical approach, expecting painkillers or other passive, technical treatments. Contrarily, it is easier to take action with patients who are used to moving before they feel pain. In this context, CPCs considered prevention message as a priority and asked for major information campaigns such as: "Until we're in the six-sided box, let's move!". They also call for free sport for everyone and, direct access from sports clubs to schools (to avoid 'parent-dependent' transport). CPCs emphasised the need of health education at school (to get a grip on life course of patients).
- Belgian chronic pain centres asked also that explanation on the content of the BPS approach is adapted since the "bio" in the BPS concept has changed. It is time to explain the neuroplasticity of the central nervous system and that in chronic pain, this is not the peripheral nervous system which is concerned as in acute pain and that therefore the treatment of localised lesions can not be useful. They mentioned the need of public media campaign as for depression, which there was an interesting slogan: "It's in the brain, not in the head!". They proposed to develop an exhibition on pain for the general public (like the exhibition on the 5 senses at the Museum of Natural Sciences).
- The annual 'pain' walk ' (i.e. 'Marchons ensemble contre la douleur chronique') from Quebec is quoted by CPCs as an interesting example to increase population awareness on chronic pain and make the invisible visible. It is yearly organised by the Association quebecoise de la douleur chronique (AQDC). (<https://douleurquebec.ca/en/>)
- Media campaigns must not overshadow the importance of patient education. Belgian patient associations emphasised the need for patients to have time to receive information on BPS and chronic pain before, during and after encounters with HCPs. They highlighted the relevance of collaboration between patient associations and healthcare providers to create and distribute accessible information. Sickness funds were also cited as a valuable source of support for patient education (see sheet Care pathway)
- Belgian patient associations proposed to train some patient ambassadors in chronic pain (as for MS). These ambassadors could explain the concept of chronic pain during training sessions or via video cartridges/bubbles, but they could also be on call at hospitals (to explain pain to patients and their families and act as a kind of mediator). Structures for training patient-experts already exist in Belgium as for example the patient-expert centre (PEC) and the Ligue des Usagers des Services de Santé (LUSS). But these patients are completely voluntary and it would be useful to support them financially.
- Some Belgian CPCs considered organising public information sessions, open to all patients with chronic pain, whether they are being treated by the CPC or not. However they mentioned that they were afraid of generating too much publicity for their services with the risk of being further overloaded.
- Key points: Awareness media campaign is proposed as one possible intervention to change the society culture, engage health system decision makers in supporting comprehensive chronic pain management, prepare patients to be more empowered, inform families and colleagues. Several examples are suggested: advertising against painkillers, public campaigns on stress (and how to reduce it), on lifestyle (including diet), on physical exercise, on neuroplasticity, on importance to move from age school. Other potential actions are direct access from sports clubs to schools (to avoid 'parent-dependent' transport), health education at school (to get a grip on life course of patients), exhibition on pain for the general public, annual pain walk, patient ambassadors, CPC information session open to the local population.

Existing experiences

We present here three kind of interventions: media campaign, other means to contact the public, and education of health in children/adolescents at school.

Media Campaign

As mentioned above, different media campaigns were developed in Belgium on health topics other than pain. These experiences can be useful and some of them are described below. Specifically for pain, several countries launched media campaigns these last years. We summarised the content of campaigns on pain from six countries : Australia, the U.S., Canada, Italy, Portugal and France. We do not aim comprehensiveness but present some interesting examples.

1. Three experiences from Belgium

- The sensitization campaign 'No Ray without a thought' i.e. 'Zuinig met straling - Pas de rayons sans réflexion' was launched in 2021 and in 2023. Both campaigns aimed to discourage people from pressuring their doctor to prescribe an examination when they have back pain. The campaign relied heavily on maximum reach, using a variety of media, both online via social networks and the website, and through radio adverts, street posters and digital screens in waiting rooms. The central information point for this campaign was the website in Dutch: <https://www.zuinigmetstraling.be> or in French: www.pasderayonssansreflexion.be. Information was available for patients and HCPs. To measure the effect of the 2023 campaign, a survey of 1,000 citizens was subsequently carried out. A comparison was also made with the effect after the first campaign from 2021. Belgian Medical Imaging Platform (BELMIP) published the results. The survey showed that 35% of the population remembers the campaign (versus 43.7% after the first campaign). Fifteen percent of the population heard/read about the campaign outside the campaign channels (e.g. in newspapers, on the news, etc.). After the campaign, participants were more likely to give correct answers to questions about medical imaging for back pain. When medical imaging is suggested, more than 40% ask about the reason for the examination and the expected effect of such an examination on the subsequent course of their back pain. However, 21.9% of the public say that they put pressure on their doctor to carry out a back scan in the event of pain, even though the doctor says that medical imaging is not necessary. This remains a point that needs to be worked on. (<https://www.becaremagazine.be/becare-juin-2023/belmip>)
- The sensitization campaign on mental wellness at work was developed in 2021 by the federal public services Social Security and Employment. The campaign encouraged everyone to talk about their mental well-being at work or at home, and to make concrete appointments to do so. It also aims to help employers to reach agreements with their employees to prevent work-related psychosocial risks. The campaign encompassed radio adverts, podcasts, video on YouTube, messages on Facebook, Instagram, LinkedIn, two websites (one for workers, one for employers) and received the support of two famous television personality. (<https://emploi.belgique.be/fr/actualites/campagne-pour-rendre-le-bien-etre-mental-au-travail-plus-ouvert-la-discussion>) It was found that practical tools were the most effective (e.g. taking a test), influencers can attract attention and videos in general performed very well. The campaign was remembered by 10% of working Belgians and by 30% of human resource professionals. Furthermore, the campaign has prompted working Belgians to consider their mental well-being and talk more openly about their workload and how they feel at work. The campaign has also encouraged employers to take action/make suggestions to prevent work-related stress and burnout. (personnal communication)
- The sensitization campaign on antibiotics 'Use them correctly and only when necessary!' included radio adverts, leaflets, posters and the comic strip "Auntie Biotica" (<https://www.usagecorrectantibiotiques.be/en>). In 2022, another campaign was launched 'Letstalkantibiotics' with several information and material available on a website (<https://letstalkantibiotics.be/> - <https://parlonsantibiotiques.be/>). These campaigns followed older initiatives in Belgium which started of national campaigns on antibiotics in 2000. Evaluations were performed for some of them such as pre- and post-campaign face-to-face interviews in 2000 and 2001, and yearly online surveys from 2014 to 2018. These evaluations showed some successes in public awareness : for example in 2000, respondents to the interviews expected less antibiotics for bronchitis, flu, sore throat, common cold and diarrhea after the first campaign compared to before; another example in 2018 showed that more patients followed their GP's instructions regarding treatment duration compared to 2016. A steep decrease in antibiotic sales (in packages) was also observed from 2000 to 2007.⁸⁴⁻⁸⁶



- Key points: In Belgium, sensitization campaigns on health topics were launched these last years with a certain success regarding attitude or behavior improvement.

2. Australia

In Australia, at least two organisations launched general campaign on pain these last year: Pain Australia (the national advocacy body described in the sheet Multistakeholder group) and Chronic Pain Australia, a non-profit, non-government, registered organisation founded in 2001 and driven by a group of committed volunteers advocating to reduce the social and economic barriers to those who live with chronic pain. We described here recent activities of both organisation.

- National Pain Week is an initiatives of Chronic Pain Australia. It takes place in the last week of July each year. The aim is to create national conversations and spread useful resources and tools for those living with chronic pain. In 2023, the campaign called **"Let Them Know How Strong You Are"** focused on the fact that men were much less likely than women to speak about their experience of chronic pain, because they saw admitting to pain as a sign of weakness. Several tools were created (e.g. banners for Facebook, LinkedIn, Twitter, email signature banner, video, poster, 'ready to' tweets...) and used across social media to encourage men to answer the National Pain Survey and empower them to speak publicly about their experience as in #painchanger stories. (<https://chronicpainaustria.org.au/wp-content/uploads/2023/07/National-Pain-Week-2023-Phase-3-Web-Toolkit.pdf>) The idea is "If people around them knew that they were carrying this invisible burden, they would realise that people living with chronic pain aren't weak, but incredibly strong". The campaign were heard by over 6.7 million people and there was an increase responses to the National Pain Survey from people identifying as male in 2023. (<https://chronicpainaustria.org.au/national-pain-week-2023-painchanger/>) Chronic Pain Australia won the PainAustralia and Pain Foundation Pinnacles Pain Sector Award for Best Consumer Awareness Campaign for National Pain Week 2023. (<https://chronicpainaustria.org.au/media-release/chronic-pain-australia-wins-best-consumer-awareness-campaign-for-let-them-know-how-strong-you-are-campaign/>)
- "Walk My Pain" was another campaign on chronic pain in 2023. It associated PainAustralia and the Chronic Pain Australia website and focused on Australian women, who make up the majority of chronic pain sufferers. The aim of the campaign was to raise awareness and push for increased funding and better treatment access. They used featured events at Parliament House in Canberra to share patient stories and there was secured extensive media coverage across News Corp, ABC, Sky News, and more.
- In 2024, social media campaigns organised by PainAustralia were the "Opioid Safety Toolkit Campaign" (with videos and educational resources) to support safer opioid use by consumers and HCPs, the Kaha App launch (an app offering on-demand education and support to help people self-manage chronic pain see <https://www.painaustralia.org.au/our-app>) and the ongoing "Chronic Pain Awareness and Storytelling". According to PainAustralia, their digital campaigns played a crucial role in expanding their reach, building a supportive community, and influencing national conversations around chronic pain. (<https://www.painaustralia.org.au/static/uploads/files/painaustralia-annual-report-2024.pdf>)

3. The United States of America

Since 2001, the American Chronic Pain Association (ACPA) offers media guides, patient resources and campaign templates to raise awareness on pain. (<https://painmed.org/pain-awareness-month-2025/>)

In 2015, the National Pain Strategy envisioned a significant effort to increase public awareness about pain and recommended development and implementation of two campaigns.

- The priority campaign was an extensive public awareness campaign about the impact and seriousness of chronic pain, to reach all people including patients, their caregivers, and health care, long-term services and supports, and social service providers. The objective was to counter stigmatization and correct common misperceptions. Several learning objectives were identified (listed in order of priority):
 1. Chronic pain is a disease.
 2. Chronic pain is manageable.
 3. Chronic pain is more prevalent than cancer, diabetes, and heart disease combined.
 4. Chronic pain is real.
 5. Most Americans will experience chronic pain or care for someone with chronic pain.
 6. People in chronic pain deserve respect, compassion, and access to timely treatment.
 7. Many people in chronic pain nevertheless live productive lives.

8. The goal for chronic pain management is to alleviate pain and restore function. Patients should be aware of realistic treatment expectations.
9. Chronic pain may cause depression and depression increases the severity of pain.
10. Chronic pain may require a spectrum of medical and surgical treatments and/or non-medical interventions, including self-management strategies along with the active participation of people with chronic pain in their own pain care management.
11. Appropriate chronic pain management may involve prescription medications, which require knowledge of risks for adverse effects such as dependency and addiction.
12. Activity level and mood may vary depending on the intensity of chronic pain (good days and bad days).
13. Awareness of conditions and activities that contribute to injury, especially in the workplace, can prevent pain.

Several deliverables were proposed at short term (e.g. start with a check and assess the impact of existing campaigns on chronic conditions to draw on successes; develop and pretest messages), medium term (e.g. implement the program and monitor audience reach, feedback and partner engagement) and long term i.e. within five years (e.g. assess campaign effectiveness regarding changes in public opinion).

- The secondary campaign aimed to promote safer medication use, especially opioid, among patients with pain. We do not developed this topic below as it is medication specific (https://www.ninds.nih.gov/sites/default/files/documents/NationalPainStrategy_508C.pdf)
The national plan mentioned that a campaign with multiple components, heavy media buys, and other activities can be costly, which underscores the importance of focused strategy development. (https://www.ninds.nih.gov/sites/default/files/documents/NationalPainStrategy_508C.pdf)
- These last years, campaigns on pain were implemented by the U.S. Pain Foundation, a nonprofit organisation dedicated to serving those who live with conditions that cause chronic pain. The U.S. Pain Foundation developed Pain Awareness campaigns during the Pain Awareness Month (September) and proposed different topics. For example, in 2021, #PainCounts showed the devastating burden of chronic pain and the impact it has on real people; in 2022, #LifeWithPain showed the real-life impact of chronic pain on individuals; in 2023, #PainTrials, focused on pain research. (<https://uspainfoundation.org/painawarenessmonth/>)
- In 2024, the #SolvePainTogether campaign explored the full experience of chronic pain, from diagnosis to building a treatment plan to learn patients to advocate for themselves. The 2024 campaign focused on the complex and diverse nature of chronic pain and the urgent need for integrated, collaborative solutions (<https://uspainfoundation.org/wp-content/uploads/2025/02/Annual-Report-2024.US-Pain-Foundation-1.pdf>). Several media were used: daily facts, statistics, or insights on social media (Facebook, Instagram, and Twitter) about various aspects of the chronic pain experience, data, and research; weekly articles on uspainfoundation.org focusing on the importance of data about chronic pain, strategies for activity management and pacing, the importance of developing an individualized pain management plan, and how to effectively communicate with a team of medical providers; an infographic highlighting updated chronic pain facts; webinar offered in collaboration with Migraine at School and the National Institutes of Health; four week virtual Pain Series, in collaboration with Humana Neighborhood Centers; weekly Health Hack events and videos, created for Humana Neighborhood Centers to provide accessible education and support; testimonies on social media using the #SolvePainTogether and #ChangingThePainEquation hashtags. The content shared was different each week (Week 1: The impact of chronic pain and the importance of pain data; Week 2: The importance of creating a multidisciplinary pain plan; Week 3: The role mental health plays in chronic pain; Week 4: The value of building effective communication with medical providers; Week 5: The effects of caregiver burnout. (<https://uspainfoundation.org/painawarenessmonth/>)
- Despite this long history of campaign awareness on pain in the USA, it was not possible to found recent studies measuring their impact in population pain understanding or healthcare policy.

4. Canada

- In the 2021 Action Plan for pain, 'increase awareness, education and specialized training in pain' was mentioned as one of the 6 primary goals. The #PrioritizePain Campaign was developed to amplify and support the implementation of the plan's recommendations. In partnership with dozens of leading pain and pain-related organizations, advocates and institutions across Canada and internationally, the campaign is coordinated by Pain Canada in partnership with its partners. The #PrioritizePain Campaign propose tools



for traditional media, social media, advocacy letter for individuals. (<https://www.paincanada.ca/media-kits/prioritizepain>)

- Each year during the first full week of November, there is also a National Pain Awareness Week (NPAW). This national social media campaign calls for collective action, and champions the rights of people living with chronic pain to live the best possible life, free from stigma and discrimination. Led by Pain Canada and Pain BC, the campaign is contributed to by many Canadian pain facing organizations, research institutes and centres. A toolkit is available with graphics and Canva template for Facebook and LinkedIn, Instagram and Threads and Twitter/X. The toolkit proposes also social media posts and, story and reel graphics. (<https://www.paincanada.ca/media-kits/national-pain-awareness-week>) In 2024, the campaign proposed a virtual free conference 'Putting the Pieces Together (PTPT)', the first and only pain conference created by and for people with lived experience of pain. The 2024 campaign reached over 1.4 million people and generated 4.5 million social media impressions. (<https://www.openaccessgovernment.org/canadas-national-pain-awareness-week-reached-over-1-4-million-people/186175/>)

5. Italy

- In Italy, the need to raise awareness among society, the healthcare system, and all healthcare professionals about burden of chronic pain was expressed in the Law 38/2010 and translated in several proposals such as to disseminate informational material in clinics and families, to produce institutional advertising-type TV movies on chronic pain, to provide public or private information campaigns and web pages containing the list of local reference centers, to develop promoting information campaigns with expert healthcare personnel in secondary schools to prepare future citizens.⁷ However, in 2023, Italian anaesthesiologists and pain specialists have called for greater public awareness and enforcement of Law 38.(Natoli) In 2025, three experts published an analysis of the data from "Vivere senza dolore" Rapporto Censis Grüenthal and emphasised the need to create multilevel campaigns focusing on chronic pain management, the role of pain management specialists and pain centres and the right to receive appropriate pain management.⁷

6. Portugal

- In 2019, a joint declaration outlined recommendations for national action on chronic pain, relevant to employment and education in Portugal. <https://europeanpainfederation.eu/wp-content/uploads/2024/03/Joint-Declaration-of-the-Platform-for-the-Social-Impact-of-Pain-in-Portugal.pdf>
- Several measures were proposed to promote training, education and awareness-raising in relation to pain and directed at the public/media; health professionals; education professionals; patients, relatives and caregivers: Regarding the training for the public/media, four actions were presented:
 - Awareness campaigns/programmes on the social impact of chronic pain in Portugal;
 - Participation and involvement of health professionals and testimonies of people with chronic pain in the media;
 - Celebration of commemorative days/thematic dates associated with chronic pain through various communication actions on the theme;
 - Involvement of different health sector partners in the discussion and debate on chronic pain.
- There is limited public data on measurable outcomes or national audits assessing the declaration's impact. Ongoing efforts by SIP Portugal include surveys and events to track societal and employment-related effects of chronic pain. (<https://europeanpainfederation.eu/sip-news/sip-portugal-2024-actions-and-objectives/>)

7. France

Several campaigns on pain were organised these last years in France by different organisations. We presented below three of them.

- In 2017, the Disease Insurance from France launched a public campaign "Mal de dos : le bon traitement, c'est le mouvement!" to inform the population on low back pain. (<https://www.ameli.fr/assure/sante/themes/lombalgie-aigue/traitement-prevention>) Several focuses were used: physical activities and sport in 2017, 2018; maintain to daily and professional life in 2019, daily life in the pandemic crisis of 2020 and a multimedia focus (TV and audio advisers, videos, press release, posters...) in 2021. After 5 years, this sensibilisation campaign appeared to reach its objectives: only 45% of French people still believed that rest is the solution to back pain (vs 70% before the campaign) and fewer than 10% of French people expected their doctor to prescribe medication to relieve lower back pain.

At the same time, almost a third of GPs gave their patients information leaflets on low back pain, and the number of people taking time off work had fallen by 41%. The impact evaluation concluded that the intervention was a success, with higher adhesion to the recommendations among those who remembered the campaign, in particular among older individuals. It was suggested for the future to develop prevention and awareness-raising messages better adapted to certain audiences who are not yet receptive, such as young people and certain socio-professional categories. (<https://www.ameli.fr/assure/sante/themes/lombalgie-aigue/traitement-prevention>)

- In 2020, the Analgesia Institute Foundation organised the #InvisiblePain Campaign in partnership with DoCTAM students. The Analgesia Institute Foundation is a partnership born in Clermont-Ferrand and approved by the French Ministry of Higher Education and Research in February 2016. It aims to support and lead projects of scientific excellence, as well as any activity of general interest, particularly of a medical, scientific or social nature, to promote translational research and innovation in the field of pain. DoCTAM is a group of seven students from advanced scientific backgrounds (PhDs in biology or pharmacists), in a specialized Master's degree in Marketing and Sales Management of the Health Industries at the Toulouse Business School and who have chosen chronic pain as topic of their health project in 2018-2019. A digital awareness campaign launched to highlight the hidden burden of chronic pain. The objective of this public awareness campaign was to remind the public that even if chronic pain is not always physically apparent, it strongly and durably alters the patients' quality of life. Eleven portraits of real patients living with conditions like fibromyalgia, cancer pain, and neuropathy were diffused progressively, during one year, at the rhythm of a new portrait every month. The portraits were published (and are always available) on the Foundation website but also on Facebook, Instagram, Twitter and LinkedIn with the hashtag #InvisiblePain. Each individual could become an actor in this campaign by sharing these visuals widely on his/her own networks! (<https://www.institut-analgesia.org/invisible-pain-campaign/?lang=en>). No outcomes measure was found.
 - The Société Française d'Étude et de Traitement de la Douleur (SFETD) proposes yearly PAINtalks. The SFETD gathers all care professionals, researchers and teachers addressing pain. In 2022, the SFETD responded favourably to a request from the 'Réseau Québécois des Etudiants Chercheurs en Douleur' (RQECD - Quebec Pain Research Students' Network) to develop in France the concept PAINtalks initiated by the RQECD across the Atlantic. The PAINtalks Québec event is a free, high-level popularisation conference aimed at the general public. Inspired by TED-style presentations, the aim of this event is to provide the general public with a series of short presentations, each 6 to 7 minutes long, to shed light on scientific concepts relating to pain. PAINtalks France is based on the Quebec concept and offers the general public explanations about pain and its possible treatments, 'performed' by French-speaking (France, Quebec) students and/or professional experts. PAINtalks France are organised the day before the annual national congress on pain and are broadcast simultaneously on the SFETD's Youtube channel, where playlists from previous editions can be found. The 2024 edition was held in Lille and focused on therapeutic education, importance of physical activities, polymedication... (<https://www.sfetd-douleur.org/paintalks-france>). No outcomes measure was found.
- Key points: There is a long history of media campaigns on pain across the world. Repetitive events such as the annual month or week of pain are often organised. There is little data on the real impact on the public but we can say that these campaigns generally bring together different pain associations and involve patients heavily in the process, for example through testimonials.

Other means to contact the public

It is not possible to show all initiative taken in the world but only example such as following:

- The University of South Australia developed a program called "Pain Revolution", which includes pain neuroscience education tailored for children. The mission of "Pain Revolution" is to train and support 1000 healthcare professionals to become Local Pain Educators, bringing their advanced knowledge and skills in pain education and care to their colleagues and communities so that every Australian has access to the skills, knowledge and local support to prevent and overcome persistent pain. Their "Brain Bus" initiative, an interactive health learning centre on wheels, travels to schools and communities to teach kids about how pain works and how to manage it. The aim is that people can experience the science of the brain through illusions, experiments and virtual reality applications. (<https://www.unisa.edu.au/Media-Centre/Releases/2017-Media-Releases/Wheeling-in-a-pain-revolution-for-regional-Australia/>)



Pain Education for Youth

Several initiatives have been developed to educate children about pain neuroscience.

- In 2016, a group of pain specialists gathered to develop a children's book called "A Journey to Learn About Pain". This cartoon book explains pain science in a story format and is freely available/ (<https://www.iasp-pain.org/publications/relief-news/article/pain-education-children-book/>) This book is designed to be used in schools, clinics, and homes to help children with pain to understand pain and develop coping strategies. Its public target is children 8-12 years old and their parents/caregivers.
- In Belgium, in 2016 also, a pain neuroscience education programme "PNE4Kids" was developed to explain the concept of pain to children 6-12 years old. The PNE4Kids program contains three sections: The first section addresses the nociceptive system and its function (as the military), the second explains the adaptations in the nociceptive system following persistent pain (including increased sensitivity of the central nervous system) and the third section addresses the translation and application of the PNE4Kids content into the patient's everyday life and subsequent treatment. To ensure interaction between therapist and child, an interactive board game was developed and used throughout the educational sessions (more info on <http://www.paininmotion.be/PNE4Kids>).⁸⁷
- In 2018, an interdisciplinary group of experts from Australia (12 clinicians and researchers) identified and gain consensus on key learning objectives for adolescent pain science education using a modified-Delphi process. The public target was adolescent with pain. Seven learning objectives were selected to form the foundation of a curriculum: 1) Pain is a protector; 2) The pain system can become overprotective; 3) Pain is a brain output; 4) Pain is not an accurate marker of tissue state; 5) There are many potential contributors to anyone's pain; 6) We are all bioplastic and; 7) Pain education is treatment.⁸⁸
- There are also initiatives in other countries as in the Netherlands where Dutch researchers have explored school-based interventions for children with chronic pain, especially targeting coping strategies and peer support or in the United States where the Meg Foundation offers resources for families and schools to support children with chronic pain, including guidelines for educators and age-specific educational sheets for kids and teens. (<https://www.megfoundationforpain.org/chronic-pain-family-education-sheets-school-guidelines/>) However these initiatives are out-of-scope of this research.

In terms of prevention, actions for pain education at school is mentioned in the joint declaration 2019 of Portugal (e.g. "Involve schools in early education regarding issues of chronic pain and prevention"; <https://europeanpainfederation.eu/wp-content/uploads/2024/03/Joint-Declaration-of-the-Platform-for-the-Social-Impact-of-Pain-in-Portugal.pdf>) and proposed in Italy such as "Promoting information campaigns with expert healthcare personnel in secondary schools to prepare future citizens"⁷ but it was difficult to find a clear description of concrete interventions following these declarations.

We found few studies assessing the impact of pain education in healthy children or adolescents:

- In 2022, one narrative review mentioned some studies with pain education delivered in larger groups of adolescents (age range 10-15 years) at middle schools. They found seven studies (from US, CA & DE) examining whether delivering pain education to larger groups of teenagers in a school/classroom setting (i.e., group sizes ranging from 15 to 70 students) via a lecture and/or a video. The results showed beneficial changes in pain knowledge, healthier beliefs regarding pain, and ultimately positive behavioral outcomes such as less pain medication use. Positive behavioral results were larger when the initial pain education session was supplemented by short video booster sessions after a few months. The authors of the review concluded that "Likewise, given its promising potential upon health-promoting behavior, implementing a dedicated pain education program in the school curriculum needs to be further explored, especially to study true long-term effects (i.e., years later) into adulthood."⁸³
- In UK, an evaluation of one day event of Pain Science Education was organised in high schools (adolescents ≥16 years old). The PSE event involved a 70-min didactic presentation followed by a series of experiential learning activities, which offered interactive experiences to reflect concepts discussed in the lecture focussing on the role of the brain in perception. Students were able to call at nine different learning stations during a 1-h period, the experience required individuals to make sense of sensory, visual, and audio inputs designed to challenge perceptions and allow them to explore how experiences can be influenced by multiple factors. Virtual Reality experiences were also available. The main finding, published in 2023, was that biomedically-focussed beliefs about pain reduced significantly whilst there was an increase in participants' biopsychosocial understanding of pain three months after the event. Additionally,

there were significant improvements in behavioural intentions in line with clinical guidelines. AS it was an exploratory study the authors recommended to carry out controlled trials with longer follow-up.⁸⁹

- In Spain, a randomised controlled trial was carried out among adolescents between 11-13 years old in the first year of Obligatory Secondary Education. The age 11 was chosen because it is considered that from the age of 11 years, young people begin to have the capacity for abstract thinking and understanding of complex concepts. According to the authors, it is a key moment in shaping the beliefs of future adults which implies that educational interventions targeting pain beliefs could have broad benefits and be an easy, inexpensive, and novel strategy for addressing chronic pain. The intervention was the “Learning Pain” programme consisting of two sessions in Pain Science Education (PSE) spaced one month apart, versus only study assessments for the control group. The “learning programme” demonstrated effectiveness in improving the conceptualization of pain at 1, 7, and 13 months follow-up assessments. However, the authors mentioned that the effect that this increase in conceptualization may have on maladaptive behaviours or on the pain itself is unknown. They suggested further work to explore the potential impact of bringing Pain Science Education into the curriculum of children or adolescents.⁹⁰

➤ **Key points:** Children/adolescents education in school settings emerges as an effective strategy for improving knowledge, beliefs, and attitudes aligned with the contemporary pain paradigm. However, pain education in healthy children/adolescents appears to be in its infancy and more controlled trials with longer-term follow-up are needed to investigate the effectiveness of this intervention before any firm recommendations can be made.

Action points proposed for Belgium

Action point 5. Improve public awareness on pain and pain management.

Action point 5.1. Set up a public campaign to demystify chronic pain

- Based on existing experiences with media campaigns in health domains from Belgium and media campaigns in pain from abroad.
- With predefined objectives, target audience, expected effects and message to be conveyed.
- Repeated over time.
- Using mainstream and social media.
- Strengthened by public events as exhibition.

Action point 5.2. Encourage research on pain education for healthy children/adolescents at school.

Stakeholder feedback

Action point 5.1. Set up a public campaign to demystify chronic pain

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the first action point (n=3/41) or its feasibility (n=5/41), or declined to comment on its acceptability (n=2/41) or feasibility (n=1/41).

Numerous stakeholders recognize the value of media campaigns in the context of pain education. Physicians, in particular, have noted that such initiatives may alleviate their clinical burden by addressing widespread misconceptions about pain that have been perpetuated across generations.

Some stakeholders emphasize that this type of action must be repeated over time and provide some additional ideas to improve the public awareness:

- The integration of accurate information and coping strategies around pain can also take place outside of traditional campaigns, for example, via television, radio, or streaming platforms. Not only can non-fiction programs (such as documentaries or talk shows) help correct misconceptions about pain, but fiction (series, films) can also play a role by presenting realistic and evidence-based information about pain and daily life with chronic pain.
- By collaborating with screenwriters, producers, and media partners, broader social awareness can be created, challenging misconceptions about pain and disseminating positive coping strategies in an accessible way. This makes it possible to reach a large and diverse audience, even outside the context of health education.
- A collaboration with VRT and patients for testimonies is suggested.
- The digital age allows us to deconstruct thoughts, to penetrate the realities of life and to convey testimonies that overlap with populations from different geographical areas. All kinds of media should be used.



- The public target and the message should be well defined. Focusing on promoting specific actions (such as staying active), without sufficiently addressing the underlying understanding of pain and its biopsychosocial nature will not be sufficient. For many people, such recommended behaviors (such as being physically active or continuing daily activities despite pain) can seem counterproductive or illogical until certain persistent beliefs (such as the idea that pain always equates to tissue damage, or that rest is necessary for recovery) are challenged. This underscores the importance of addressing not only the "what to do," but also the "why" if we want to achieve meaningful and lasting change.
- According to Sciensano, 33% of Belgians have low health literacy, so any effort to inform people is welcome. Working together with patients is recommended so that the right tone and message can be conveyed.
- The ultimate goal should be to motivate and activate patients and give them the opportunity to develop through the understanding of others. Be careful not to let it become a "culture of complaining." The ultimate goal isn't to explain to people why people with chronic pain can't work, can't leave the house, can't participate in social activities, etc. It is also not the intention to send all patient with any pain to pain specialists.

However, some stakeholders mentioned also concerns regarding the cost and the uncertain efficacy of media campaigns.

- This requires substantial funding, coordination between associations, authorities and media, and clear political decisions. Without this, the risk is that the campaign will remain ad hoc, without any real follow-up or lasting impact.
- There is also the risk that this kind of campaign does not reach the most vulnerable population despite their important cost.

Action point 5.2. Encourage research on pain education for healthy children/adolescents at school

Acceptability and feasibility of this action point are moderate. Some respondents expressed doubts about the acceptability of the second action point (n=6/41) or its feasibility (n=9/41), or declined to comment on its acceptability (n=4/41) or feasibility (n=6/41).

Some stakeholders are convinced that action at school will help to change the culture in the society and decrease misbeliefs regarding pain. This could also be helpful for children presenting pain since they could feel being understood and less alone.

- We must be careful not to be too accusatory as a society when chronic pain problems do develop. A society must support its citizens, not exclude them, especially the most vulnerable among us.
- Make it clear to the child that it's not their fault that mommy/daddy is in more pain at certain times.
- Include health education and lifestyle advice.
- Use games for children and testimonies for adolescents. Start with a pilot project.
- Evaluation needed after implementation

Conversely, some stakeholders advocate against broad pain education campaigns targeting children, citing concerns about cognitive complexity and limited relevance. They suggest focusing on adolescents or only on children already experiencing chronic pain, with. Schools face competing priorities, including staff shortages, which may hinder participation. Implementation would also require dedicated funding.

Amended action points

Action point 5.1. Set up a public campaign to demystify chronic pain

The campaigns should be:

- Based on existing experiences on media campaigns in health domain from Belgium and media campaigns in pain from abroad;
- Using mainstream and social media.
- Starting with predefined objectives, target audience, expected effects and message to be conveyed.
 - Given the problem of low health literacy in the Belgian population, sufficient attention must be paid to the comprehensibility of the message. In addition, it is not only necessary to communicate how people should adapt, but also to put enough emphasis on the reasons behind the recommended measures.



Finally, careful consideration must be given to how the target audience can be reached, especially when the campaign is aimed at the more vulnerable groups within the population;

- The cost-effectiveness of each option (TV, radio, social media...) needs to be assessed thoroughly according to the objective, target audience, expected effects and budget.
- Repeated over time;
- Strengthening by public events as exhibition.

Action point 5.2. Encourage research on pain education for healthy children/adolescents at school

Objectives of the action points

- To improve public awareness and knowledge on acute and chronic pain, BPS, lifestyle, treatment options...
- To disseminate clear explanation about all the factors that can influence pain
- To encourage appropriate lifestyle such as regular physical activity
- To support patient empowerment (emphasizing the value of pain self-management programs in enabling people to live better with chronic pain)
- To decrease misconceptions about (chronic) pain
- To decrease the risk of patient stigmatisation

Target stakeholders

- Media professionals
- Public health organisation and authorities
- HCPs and social professional organisations
- Patient associations
- Insurers, sickness funds
- Researchers
- Schools for children-adolescents

Points of attention or required conditions

- The Federal Public Service Chancellery of the Prime Minister (Directorate-General for Communication) provides technical data sheets to help prepare a media campaign.
- At the European level, there is an informal network of senior government communication professionals that promotes collaboration, shares best practices, and supports members in strengthening public communication throughout Europe (<https://veniceclub.eu/>)
- Some barriers to advocacy campaigns are identified such as competition between different topics for the attention of the general public and the resources of health system decision-makers.
- There is a risk that awareness campaigns as all educational interventions can increase health inequities.⁹¹ It is why campaigns (or tools) should be adapted to vulnerable population, with the involvement of the targeted population since the development of the action (see equipp.org.au).
- Prior to the research implementation, consultations should be held with schools to determine how this can be introduced while keeping the (already high) burden on schools under control.



1.6 Financing

Improve financing of the multimodal approach to chronic pain

Definition

Financing system for the multimodal approach to chronic pain refers to the financing mechanisms that allow access to integrate social services and primary and specialised high quality health care.

Background

Issues linked to the financing system in the literature

- The literature focusing on patients with pain (see chapter 3. Literature review in the [scientific report](#)) showed that social security and health insurance supporting the healthcare system may affect the access to care by providing insufficient financial coverage for the patients.^{27, Van Dijk, 2022 #228, Wilson, 2015 #252}
- The criterion for the funding set by healthcare systems, insurers or organisations can be incompatible with the use of a BPS approach since this could influence how HCPs worked (e.g. fee-for-service or lump-sum payment), who to refer to, treatment type, time slice, duration, and frequency to see patients.¹⁴ For example, a lack of funding to compensate HCPs for their time and skills in exploring psychosocial aspects is mentioned by several authors.^{14, 24, 25, 92}
- Regulations may also impede the use of a BPS approach such as in Germany where physicians can be financially penalised for over-referring. As a consequence, GPs are rationalising referrals of patients with chronic pain to physiotherapists for fear of these financial penalties.¹⁴
- The process of returning to work may be impeded by the difficulties and economic insecurity that patients may experience when moving from welfare benefits to employment.⁹³

Current financing system in Belgium

The costs linked to the management of chronic pain in primary care is covered by the overall fee-for-service system for GP, physiotherapists and psychologists. The maximum number of reimbursed sessions with a [physiotherapist](#) varies according to the underlining pathology to chronic pain. For example, the maximum annual number of sessions may reach 60 sessions for fibromyalgia. The maximum reimbursed sessions with a [clinician psychologist](#) in primary care is 20 individual sessions for patients aged 15 or more but there is no limitation for group sessions. There is a patient copayment for consultations with GPs, psychologists and physiotherapists.

In addition, certain patients with chronic pain are granted increased reimbursement for some [analgesics](#) by the health insurance system. From 2020, the analgesics are reimbursed at 75% rate instead of 20%. It is important to note that this entitlement is subject to authorisation by a medical adviser of the sickness fund. An attending physician must certify that the patient has a pain for more than 3 months due to cancer, arthrosis/chronic arthritis, neurogenic or neuropathic pain, of central or peripheral origin (including multiple sclerosis), peripheral vascular pain, post-surgical pain (including phantom limb pain) or fibromyalgia.⁹⁴

Medical services in pain centres are billed on a fee-for-service basis. For the services of other healthcare professionals, non-funded centres bill also on a fee-for-service basis, while the 35 funded centres have a global budget to cover the activities of non-medical teams of up to 4.75 full-time equivalents (FTEs). This non-medical team includes a psychologist, a nurse, a physiotherapist, a social worker, secretaries, and an occupational therapist. This global budget also covers a medical team of 0.3 FTEs, comprising four doctors (an anaesthetist, a rehabilitation specialist, a psychiatrist and a neurologist or neurosurgeon), whose roles are described in chapter 4. The current care offer in Belgium in the [scientific report](#). Remuneration is also provided for attending physicians who participate in multidisciplinary meetings.

Issues linked to the financing system reported by Belgian stakeholders

The current system for covering chronic pain management services poses challenges for both patients and healthcare providers.

- The rules governing the number of consultations reimbursed for sessions with physiotherapists and psychologists are not suited to patients with chronic pain who often need more than the authorised limits. This can result in significant costs for the patients. [Patient associations – CPC]
- In addition, there is a lack of appropriate nomenclature for physiotherapists' and psychologists' care of patients with chronic pain. [Personal communication]
- The low number of "conventioned" physiotherapists and clinical psychologists available results in patients seeking consultations with "non-conventioned" professionals who do not adhere to tariff agreements

negotiated between representatives of the practitioners and sickness funds. This increases the financial pressure on patients both in primary care and in pain centres.[Patient associations – CPC] This pressure is even greater if chronic pain prevents patients from working.[Patient association] Some centres have observed that certain patients stop their treatment for financial reasons.

- Furthermore, patients sometimes perceive the application of financial protection mechanisms and reimbursement rules as opaque and difficult to understand (e.g. MAF (maximum à facturer, maximumfactuur)⁹⁵, application of the third-party payment system, recognition on the list of E pathologies, etc.)⁹⁶. [Patient association]
 - Furthermore, patients emphasise the absence of recognition for the time devoted to the consultations. This refers to the absence of financial remuneration for family carers, who are sometimes compelled to stop working or reduce their working hours, or for healthcare professionals, who dedicate specifically a lot of time to patients with chronic pain but without an underlying diagnosis to explain it. [Patient association]
 - According to the HCPs from the visited CPCs, pain centres, whether funded or not, are all operating at a significant loss for many years. There are many reasons for the centres' lack of profitability. Firstly, the healthcare nomenclature is the main reason for the imbalance between financial income and human resource costs. Technical procedures (e.g. infiltration performed by an anaesthetist) are highly valued, while intellectual procedures (e.g. long consultations, multidisciplinary consultations) are lower or not valued. The CPCs mentioned that hospital management sometimes exerts pressure on their functioning, which favours interventional approaches, which are more profitable, at the expense of the components of the biopsychosocial approaches. Various mechanisms have been identified to curb financial losses: (a) using financial income generated by technical procedures to (partially) cover the costs of human resources required for the multimodal management of pain; (b) providing hospital financing for nurses, physiotherapists, psychologists and social workers; and (c) offering group (physiotherapy) sessions instead of individual sessions. Secondly, the global budget of funded centres does not cover their operating costs and the activities set out in the agreement with the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE). Funded centres therefore implement mechanisms identical to those mentioned above. The non-funded centres do not receive any additional financial support for their operating cost and care activities, all costs related to the biopsychosocial management of pain are charged to the patients or supported by the hospitals. Thirdly, the problem of "no shows" (e.g. patients who are unable to travel due to pain) impacts the centres' profitability and lengthens waiting times for new patients. These waiting times are also exacerbated by the unattractiveness of healthcare providers caused by a nomenclature that does not allow them to achieve profitability in their professional activity (e.g. independent physiotherapists). [CPC]
- **Key points:** General financing roles are not adapted to the BPS approach and the multimodal management of pain of chronic pain and promote the biomedical approach. The global budget for funded CPCs does not cover their operating costs and the activities set out in the agreement with the federal health authorities. Patient co-payment is high mainly due to the financing roles (e.g. financial protection mechanisms, reimbursement rules or the adherence of HCPs to tariff agreements negotiated between representatives of the practitioners and sickness funds).

Potential actions

- Wilson et al. proposed brokering and supporting the implementation of a cross-payer, cross-discipline model of patient-centred primary healthcare-based chronic pain management that addresses the full spectrum of comprehensive chronic pain care (e.g. prevention, early intervention, treatment, management and rehabilitation).⁶ According to Wilson et al., rewarding quality and efficiency requires prerequisites such as rebalancing fee schedules away from procedures and towards payment for the time demands associated with chronic pain assessment, management, support, and liaising with payers and employers.⁶
- Both patient associations and pain centres are calling for a reform of the financing system to enable greater integration of care and stronger support for a biopsychosocial approach. The proposed solutions are in line with the recommendations of Wilson et al., namely financing the care pathway rather than paying for individual services.⁶ According to CPCs, this would require a complete review of the criteria for the recognition and funding of pain centres. Various avenues for specialised care are being explored, such as taking long consultations into account, rebalancing the financing of technical and intellectual procedures, improving the funding of physiotherapists, psychologists, and other paramedics (e.g. by offering group sessions and free services provided by paramedics), reviewing the salary scales on which global budget is



based, financing interprofessional consultations and peer review meetings with primary care, and evaluating results of the CPC via PROMs and PREMs.[CPC]

- Patient associations are calling for chronic pain to be recognised as a health condition in its own right, in order to open up social assistance rights that would cover the costs of care, particularly for psychologists, as well as providing access to family assistance and financial support for carers. A personalised budget envelope based on each patient's specific needs is a proposed solution to support patients with pain. The need for funding of the patient associations to promote communication about chronic pain among the general public and ensure the role of 'peer support' in collaboration with sickness funds is also emphasised.[Patient associations]
 - In the context of integrated care, a review of the literature, as a part of KCE report 359, showed that fee-for-service payment hinders the adoption of a multidisciplinary approach.⁹⁷ The evidence in the literature showed the benefits of combining fee-for-service payment with alternative payment methods (e.g. bundled payment, pay-for-performance, or other forms of flat-rate payment). To ensure the transition to a value-based financing model, it is advisable to include at least a substantial amount of payments not directly linked to services, as well as explicit incentives for quality. Furthermore, the KCE report 359 also indicated that the ongoing comprehensive reform of the nomenclature aims to address the significant income disparities between different (medical) disciplines, while also providing new financing arrangements for multidisciplinary meetings and collaborations. While these reforms are still ongoing and involve many uncertainties, they provide an ideal opportunity to develop new financing methods. The date of implementation of reform is still unknown. In addition, the authors of the KCE report 359 recommended to test a new financing system at a small scale before generalisation.
 - 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 and payment system.⁹⁷
- **Key points:** Several proposals were identified to adapt the financing roles to the BPS approach for the patients with chronic pain: implement a new financing models in place of pure fee-for-service system (e.g. combining fee-for-service payment with alternative payment methods or pay for quality), review the financing method of the funded CPCs, review the tariff agreements (nomenclature)

Existing experiences

In 2023, the federal and federated authorities concluded an interfederal agreement to establish an integrated social and health care plan. This agreement establishes the basis for structural cooperation between the federal and federated authorities. From a financing perspective, the development of financing models that encourage integrated care and assistance is considered. Co-financing is agreed between the federal authority and each federated entity, based on their respective responsibilities. This co-financing covers the cost of procedures/services within the framework of integrated social and health care at the micro level, as well as the cost of meso-level activities that aim at supporting social and health care professionals in their work.

In 2025, an initial integrated care programme was launched for pregnant women, children and their families during the first 1 000 days of life.

- **Key points:** The interfederal agreement to establish an integrated social and health care plan facilitates the BPS approach by establishing a structural cooperation between the federal and federated authorities.

Action points proposed for Belgium

Action point 6. Improve financing of chronic pain management

Action point 6.1. Revise the current funding system for pain management by incorporating this consideration into the ongoing revision of nomenclature and hospital payment system.

- To encourage a multimodal approach and patient-centred care in chronic pain management, the system of funding of pain centres should be reviewed.
- Similarly, it would be appropriate to analyse the transition from a purely fee-for-service funding system to a mixed funding system, similar to the payment system used in integrated care.
- This new funding model should be developed as a part of broader discussions on revising the nomenclature and hospital payment system.



- This new model should be based on clinical practice guidelines and recent evidence, in order to discourage the provision of low-value care (see sheet Care pathway).

Action point 6.2. Allocate a specific budget to integrate care for patients with chronic pain by developing an integrated care program (see sheet Interprofessional collaboration).

Action point 6.3. Implement transitional measures before rolling out the new financing mechanisms

- The practical implementation details and financial impact of the proposed financing measures could be tested in a pilot project.

Stakeholder feedback

Action point 6.1. Revise the current funding system for pain management by incorporating this consideration into the ongoing revision of nomenclature and hospital payment system.

- To encourage a multimodal approach and patient-centred care in chronic pain management, the system of funding of pain centres should be reviewed.
- Similarly, it would be appropriate to analyse the transition from a purely fee-for-service funding system to a mixed funding system, similar to the payment system used in integrated care.
- This new funding model should be developed as a part of broader discussions on revising the nomenclature and hospital payment system.
- This new model should be based on clinical practice guidelines and recent evidence, in order to discourage the provision of low-value care (see sheet Care pathway).

Acceptability of this action point is high but feasibility is moderate. Few respondents expressed doubts about the acceptability of the first action point (n=4/36) whereas more are concerned by its feasibility (n=9/36); few declined to comment on its acceptability (n=3/36) or feasibility (n=3/36).

The stakeholders confirm that funding for pain centres is insufficient to cover the entire care pathway. In addition, as the funded 35 centres are considered as pilot projects, they do not receive sustainable funding. Financing techniques should therefore cover all biopsychosocial dimensions, i.e. interventional procedures and drugs, as well as therapeutic education and interventions provided by psychologists, social workers and case managers. A mixed funding system could help to reach this goal.

Financing for chronic pain care should guarantee access for the most vulnerable populations and reduce waiting lists to prevent patients from turning to expensive private initiatives.

However, some concerns are mentioned:

- The concept of low-value care is complex and difficult to objectify, and is not subject consensus. Financing should instead enable an evidence-based care pathway that considers the presence or absence of underlying pathology.
- There are several obstacles to revising chronic pain management financing, including the need for political will, institutional resistance, the nomenclature review conducted in isolation by discipline, and the planned savings in the healthcare budget.
- The financing of chronic pain management should be a part of a broader reflection on the financing of chronic diseases. It also should serve as a model for other complex conditions. Recognizing chronic pain as a chronic health condition would entitle patients with chronic pain to a range of rights dedicated to chronic patients.
- Funding for chronic pain management should include a budget for supporting patients in maintaining or returning to work.

Action point 6.2. Allocate a specific budget to integrate care for patients with chronic pain by developing an integrated care program (see sheet Interprofessional collaboration).

Acceptability of this action point is high but its feasibility is moderate. Few respondents expressed doubts about the acceptability of the second action point (n=2/36) whereas more are concerned by its feasibility (n=9/36); few declined to comment on its acceptability (n=4/36) or feasibility (n=4/36).

According to the stakeholders, patients with chronic pain often experience a fragmented pathway, moving from one specialist to another without any real coordination. Allocating a specific budget for an integrated care program would improve continuity, foster interdisciplinary collaboration, and ensure more consistent, patient-centered care. This realization of integrated care is a strong demand from the field and meets a real need.



However, in practice, implementation could be difficult. This requires dedicated funding, coordination between different levels of the government (federal and federated entities), and recognition of chronic pain as a public health priority. In the current budgetary context, there is a risk that this type of program will not be prioritized, even if its long-term benefits are obvious, both for patients and for society.

A number of considerations were formulated concerning the development of an integrated care programme:

- The current elaboration of the concept is too abstract.
- It should better to develop further existing pathways within current multidisciplinary pain centres and expansion to other hospitals that do not received federal funding in this regard.
- This proposition cannot be viewed separately from the broader integrated care plan, and experience shows that the development of interfederal programs is a time-consuming and complex process.
- There is a need for a clear method for measuring the efficiency and output of lump sum financing for chronic pain management.
- In any case, this should not detract from the autonomy of the physician or the necessary technical acts to treat chronic pain patients.
- Funding logic should aim to support overall support, rather than fueling a logic of fragmented pathways. It is therefore important to avoid a logic that is purely symptomatic so as not to create further compartmentalization.

Action point 6.3. Implement transitional measures before rolling out the new financing mechanisms

- The practical implementation details and financial impact of the proposed financing measures could be tested in a pilot project

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the third action point (n=2/36) or its feasibility (n=3/36), or declined to comment on its acceptability (n=6/36) or feasibility (n=7/36).

While stakeholders recognize the need to test any new funding model, they question what form this should take. They doubt that evaluating a pilot project will lead to meaningful political decisions. This could perpetuate a model that does not allow for sustainable funding. Funding should be the subject of a specific study to be included in discussions on hospital funding reform. The need for transitional measures will depend on how quickly a new organisational and/or funding model can be implemented.

Amended action points

Action point 6. Improve financing of chronic pain management

Action point 6.1. Revise the current financing system for pain management by incorporating this consideration into the ongoing revision of nomenclature and hospital payment system.

- To encourage a multimodal approach and patient-centred care **during the management of patients with chronic pain**, the **current** system of financing for pain centres should be reviewed. **During this revision, all dimensions of the biopsychosocial model should be considered (i.e. interventional procedures, medications, interventions provided by physicians, physiotherapists, psychologists, nurses, social workers and care managers).**
- **Due to this multitude of dimensions, Similarly,** it would be appropriate to analyse the transition from a purely fee-for-service financing system to a mixed financing system, similar to payment system used in integrated care **(see KCE report 359).**
- This new financing model should be developed as part of broader discussions on revising of nomenclature and hospital payment system.
- This new model should be based on clinical practice guidelines and recent evidence, in order to discourage the provision of **low-value non-evidence-based** care (see care pathway).

Action point 6.2. Allocate a specific budget for integrating care for patients with chronic pain into the integrated care programme (see interprofessional collaboration).

Action point 6.3. Implement transitional measures before rolling out the new financing mechanisms

- The practical implementation details and financial impact of the proposed financing measures could be tested in **a pilot project** ~~a pilot project~~ **an appropriate design study (e.g. "virtual" payments or test in volunteer providers) (see KCE report 359).**⁹⁷



Objectives of the action points

- To improve financing access to multimodal care to patients
- To improve interprofessional collaboration
- To improve care coordination
- To support better financing of the “intellectual act” (e.g. the time spent with the patient)

Target stakeholders

- Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE)
- NIHDI (RIZIV-INAMI)

Points of attention or required conditions

- The financing of chronic pain management should be a part of a broader reflection on the financing of chronic diseases. It also should serve as a model for other complex conditions. Recognizing chronic pain as a chronic health condition would entitle patients with chronic pain to a range of rights dedicated to chronic patients.
- Since the current existing pathways are considered too fragmented, a consistent and holistic vision should be adopted to avoid further compartmentalization and fragmentation.
- The link between reforms in financing and hospital reforms must also be taken into consideration here.
- The political will to reform the management of chronic pain in Belgium is paramount.
- Experience from the development of other inter-federal programs has already shown that this involves a high degree of complexity and time investment.
- The institutional resistance to change has to be taken into account.
- The revision of the nomenclature is performed by discipline and is not yet transversal.
- Funding for chronic pain management should include a budget for supporting patients in maintaining or returning to work.
- The choice of study design to test the financing system should be guided by its ability to support decision-making. There is a need for consensus on how to measure the efficiency of lump sum funding.



1.7 Data collection and research

Support data collection and research regarding chronic pain

Definition

A patient registry is defined as an organised database containing clinical and non-clinical data, the purpose of which is to evaluate specified outcomes for a population defined by a particular disease, condition or exposure. The establishment of a patient registry is predicated on a standardised data collection process, with the objective of fulfilling predetermined scientific, clinical or policy-oriented purposes. The establishment of a patient registry has the potential to complete the findings of randomised controlled trials (RCTs) by providing 'real-world' data. This 'real-world' data can inform the clinical effectiveness and safety of interventions when used in a diverse array of patients (e.g. patients of varying age, with multiple comorbidities) and clinical settings.⁹⁸

Depending on the nature of the data being collected, a patient registry may be used to inform the progression of a condition, to monitor the quality of care, to assess the effect on specific health outcomes, to assess the cost of an intervention or to provide data for scientific researches.⁹⁸ A systematic review of the impact of clinical registries on the quality of patient care and clinical outcomes, which gathered papers from 1980 to 2016⁹⁹, demonstrated a positive impact of registries on healthcare processes and outcomes. This positive change was found in care processes, the quality of care, treatment outcomes, adherence to guidelines and survival.

Multiple data sources may contribute to a patient registry. The data can be sources from various clinicians (e.g. health outcomes), health institutions (e.g. type and frequency of health interventions), social workers (e.g. type and frequency of social interventions), sickness funds (e.g. societal cost, out-of-pocket cost of a intervention) and patients (e.g. PROMs^h and PREMsⁱ).⁹⁸

Background

Data collection

- In USA, data collection using standardized data entry has shown significant improvements in patient journeys.⁷ This highlights the interest of collect data. To support the data collection initiatives, the International Association for the Study of Pain (IASP) has established a Pain Registries Special Interest Group with the objective of providing guidance on best practices in developing pain registries. The group also aims to encourage existing medical registries (not specifically related to pain) to include some "agreed" standard pain outcomes as a minimum.¹⁰⁰
- In Belgium, there is a paucity of epidemiological data on chronic pain. Given the widely acknowledged substantial burden of chronic pain, there is a clear necessity for objective data in order to convince policy-makers to address with chronic pain management. The RIZIV-INAMI Commission for Healthcare Objectives has identified several objectives, including the improvement of data collection and sharing to support health policy at a macro level and improve care integration for individual patients.¹⁰¹ This objective aligns with the idea of collecting data to improve understanding of the chronic pain management in Belgium as mentioned by the patient associations. The latter made the observation that there was a necessity to evaluate the social impact of chronic pain including its financial burden to society. Nevertheless, the patient associations have expressed concerns regarding the cost of such a registry and the potential impact of these costs on other interventions for chronic pain management. [Patient association]

Research

- The authors of the Belgian guidelines on the management of chronic pain in primary care²⁹ have developed a research agenda related to:
 - the efficacy and safety of treatments for patients with primary chronic pain (e.g. the long-term effects of non-pharmaceutical treatments, the effects of psychological care, the long-term safety of pharmaceutical treatment, the effects of interventions combining pharmaceutical and non-pharmaceutical treatments, the effects of other co-interventions);

^h Patient-reported outcomes measures

ⁱ Patient-reported experience measures



- the effects of treating common comorbidities (such as overweight/obesity, insomnia, and stress intolerance) on chronic pain management;
 - the identification of patient subgroups or situations in which pharmaceutical treatments add value to other interventions;
 - the feasibility of the use of a uniform digital communication platform;
 - the cost-effectiveness of individualized care and multidisciplinary care;
 - the chronic pain management in specific disciplines.
- In addition to this research agenda, a need to assess the effect of interprofessional training on pain knowledge and attitude among Healthcare professionals (HCPs), on collaborative practices in clinical settings¹¹ and to develop indicators for chronic pain management [CPCs] were identified.
- **Key points:** While evidence showed that patient journey can be improved based on the analysis of real-world data, there is a paucity of epidemiological data on chronic pain in Belgium. The IASP provides guidance to support the development of (chronic) pain registries. However, there are several obstacles to establishing such a registry, including privacy concerns, issues regarding health condition coding, and the need for human and financial resources to ensure the long-term sustainability of information systems. A research agenda is available in Belgium regarding the effect of the BPS approach on chronic pain management, and some research questions are proposed to measure the effect of interprofessional training on the implementation of multimodal chronic pain treatment. Research is also needed to develop validated indicators.

Potential actions

Data collection

- Wilson et al proposed the establishment of a patient registry centred on the epidemiology of the conditions and treatment monitoring system aiming to analyse the provision of care (type of services, care providers and care frequency).⁶ In addition to the substantial uncertainty regarding the benefits-risks balance of the data collection, the authors identified several obstacles including privacy and “General regulations for the protection of workers” (RGPD - ARAB) concerns, the nature of the chronic pain condition, which is not classified as a disease per se and can be associated with various diagnoses or no diagnosis, and the human and financial resources required to ensure the long-term sustainability of information systems (e.g. training of the HPC to recode the data, budget to maintain the quality and analyse the data). To address these barriers, Wilson proposed to implement the registry in the form of a program of research rather than a government or regional health authority initiative.⁶
- The same authors proposed to create a national network of centres with a coordinating ‘hub’ to provide chronic pain-related decision-support based, among other on:
 - Analyses of data about treatment patterns (which can include the analysis of data from a patient registry/treatment-monitoring system);
 - Syntheses of research evidence;⁶

Research

- Develop a national research strategy is an objective mentioned by some countries in their pain action plans (AU, CA, UK) (see sheet National Action Plan).
- Several research topics are mentioned in the literature such as:
 - The effect of peer support intervention in patients with chronic pain¹⁰²;
 - The identification of the physiotherapists’ skills needed for negotiating and shared decision making regarding a BPS approach²⁵;
 - The effect of communication behaviours in the context of psychologically informed physical therapy on treatment outcomes¹⁰³;
 - The effect of pre-outpatients group interventions (i.e. during the time period after referral to the chronic pain outpatient service and before the outpatient visit) on system-related and patient-related outcomes in chronic pain. System-related outcomes may include waiting times, unit cost per patient, uptake of individual clinic appointments after group appointment, and health care. The patient-related outcomes could include assessment of pain, physical and emotional functioning, PROMs and PREMs, symptoms and adverse events and participant disposition¹⁰⁴;



- Wilson et al. proposed to create a multistakeholder working group that periodically identify priorities for new primary and secondary research and the communication of these priorities to relevant funders.⁶
 - In addition to researchers, universities and health professionals, research initiatives should involve all segments of society, including local communities, patients, and policy-makers [Patient association & Wouter Munneke]
- Key points: In the literature, a double aim of data collection is proposed: a data collection on chronic pain epidemiology and a data collection on treatment monitoring. Several obstacles to those data collections were identified: privacy and “General regulations for the protection of workers” (RGPD - ARAB) concerns, the nature of the chronic pain condition, and the human and financial resources to ensure the long-term sustainability of the data collection. The analysis of data from registries may be supported by a national network of CPCs. Several research topics can be identified from the literature. A proposed solution for the prioritisation of research is the creation of a multistakeholder working group that includes not only researchers, universities, health professionals but also local communities, patients, and policy-makers

Existing experiences

Belgian experiences in data collection and research

In Belgium, there is no registry focusing on pain but well on specific diseases such as cancer, data collection on chronic conditions, assessment of the chronic pain centres or database on invasive neuromodulation of pain. We briefly described these experiences below.

Experiences related to disease related registry

- In the recent decades, registries and databases have been developed to collate health data on a range of conditions¹⁰⁵ such as the Belgian Cancer Registry (BCR), the Belgian Tuberculosis Registry, the Belgian Pilot Spine Registry, the Central Registry of rare diseases, the Belgian Diabetes Registry (BDR), Belgian Neuromuscular Diseases Registry (BNMDR), the Belgian Cystic Fibrosis registry (BCFR)... Sciensano, formerly known as the Scientific Institute of Public Health, has been entrusted with the centralisation of clinical registries on a dedicated platform, Healthdata.be. Sciensano is also responsible for the standardisation and uniformity of data collection. The data is only available to authorised researchers. However, an overview of publicly accessible web applications with health and healthcare-related data is available on the FAIR portal (<https://fair.healthdata.be/>).
- Neuro-Pain is worldwide the biggest database on invasive neuromodulation of pain, with fully integrated screening, psychological assessment, long-term follow-up of patients. More than 13.000 patients currently included and several scientific publications.(personal communication)
- In addition, a federal Health Data Agency (HDA) was established in 2023 with the aim, among other things, of streamlining requests for access to health data, facilitating the standardisation and “FAIRification” of data, providing a national data catalogue, and being the national contact point for secondary use of health data.

Examples of experiences related to the evaluation of prevalence of chronic conditions and patient outcomes

- The Health interview survey, conducted by Sciensano, examines the prevalence of chronic conditions within a representative sample of the Belgian population.¹⁰⁶ However, it does not survey chronic pain.
- In Belgium, the Patient Reported Indicator Survey (PaRIS) of People living with chronic conditions, initiated by the OECD and implemented by Sciensano, had gathered PROMs and PREMs from individuals ≥ 45-y with chronic conditions in primary care settings in 2024. However, chronic pain is not one of the chronic diseases under study.(<https://www.sciensano.be/fr/paris-patient-reported-indicator-survey>)

Experiences of evaluating of chronic pain prevalence in primary care and, structure and process indicators in CPCs

- A study in French-speaking Belgium (Brussels and Wallonia) has estimated the burden of chronic pain in general practitioners (GP) consultations. Chronic pain patients account for 49% of GP patient contacts during routine consultations. Most of these patients have been suffering for more than one year. Pain was the primary motive of the consultation for 54% of chronic pain patients.¹⁰⁷
- The Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE) collects data from the 35 funded Chronic Pain Centres (CPCs). The data collection tool is an Excel file comprising of 3 parts: (1) evaluation of the centre's structure, i.e. its clinical and training activities, those of the

coordinator physician and the team members; (2) evaluation of the process, i.e. the organisation of the multidisciplinary meetings and on the network with other CPCs, post-operative nurses or algologists; and (3) evaluation of the number of patients.

Results are published in the form of a general report, and an individual feedback is sent to each funded CPC. However, these results are not published regularly. The last publicly available report concerns the data from 2011 and the publication of next report is progress.

Experiences from abroad in data collection and research

Data collection experiences

We identified several registries focusing on pain from abroad. There are for example (non-exhaustive list) :

- In Italy, the Rapporto Censis Grünenthal (Censis Grünenthal Pain Report).⁷
- In Canada, the Quebec Pain Registry.⁹⁸
- In Australia & New Zealand, the EPOC (electronic Persistent Pain Outcomes Collaboration)¹⁰⁸
- In Germany, the KEDOQ but also a registry on perioperative pain (PainOut) (out-of-scope for us)
- In Greece, the Greek Neuropathic Pain Registry.¹⁰⁹
- In Denmark, the Danish Clinical Pain Registry (PainData).¹¹⁰

Instead of describing each of this registry, we have tried to found evaluation of their functioning and findings. We contacted several stakeholders to discuss about their experiences (see the colophon). These interviews have revealed that:

- Registries are primarily based on data collected in tertiary pain centres but Sweden is piloting a regional data collection in primary care to evaluate the BPS approach to chronic pain. However, identifying patients with chronic pain has been reported as challenging due to the wide range of potential diagnoses.
- Four objectives of the data collection in CPC were identified: (1) provide feedback to clinicians and CPCs, (2) support clinical researches with real word data (3) support policymaking (e.g. guideline development) and then (4) the international benchmarking to learn from best practice:

1. Feedback

- The first purpose of such a registry is to be a clinical tool providing patient forms including PROM to support clinicians from the CPCs.
- The feedback to CPCs aims to compare their activities with each other to improve the care organisation. This feedback can take the form of a dashboard with process indicators (e.g. length of treatment, waiting time) and outcome indicators (e.g. PROM & PREM). It can be accompanied by an executive summary and in Sweden, by a meeting between CPCs one or twice a year. An interactive example is provided in France by the platform "Piramig" (https://www.piramig.fr/doc/Plaquette_PIRAMIG.pdf)

2. Research

Data from a registry also aims to provide real-work data for clinical research on pain care organisation, the efficacy and cost-effectiveness of the multimodal treatment for chronic pain. Clinical research also focuses on identifying of subgroups of patients for whom the care is ineffective. Such analysis of the data helps to optimise care organisation. [Canada]

3. Policy making

Data from a registry, such as epidemiological and clinical data, may support policymaker for guideline development, care pathway, organisation and funding of care.

4. International benchmarking

International benchmarking can help define the data to be collected and identify best practice in care organisations.

- The success of a data collection for a registry collecting data from tertiary pain centres depends on the following factors:

1. The nature of data collected

Not only clinical data should be collected but also PROM and PREMs before and after the treatment in CPCs. (This approach will indeed be implemented in the revised version of the Neuro-Pain registry (version 2.0, active hopefully by end of 2026).



The involvement of HCPs and patient representatives in the definition of the data to be recorded is a success factor for the implementation. [Canada]

The data collection should take into account of the “General regulations for the protection of workers” (RGPD - ARAB). If longitudinal data is collected to follow the pathway of the patient, an advise of an ethical committee must be asked.

2. The number of data to be collected

All stakeholders were advised to keep the data collection as short as possible. While the success of a registry partially depends on the country's assessment culture, we must bear in mind that people are increasingly asked to complete questionnaires.

The definition of the minimum data is a very long process. Therefore, interviewed stakeholders advocate to build minimum data on the international experiences and validated tools.

It is crucial to keep the amount of data to be collected to a minimum to avoid missing data.

3. The data collection platform

An easy-to-use IT solution should be employed to collect data from clinicians at tertiary pain centres (e.g. via a data transfer via a secure website). Installing software locally on each computer should be avoided. Automatic extraction from the centre's database should be preferred, because while using a nurse to fill in the questionnaire helps to ensure accurate medical data is recorded, it is very costly.

A secure website could support the collection of PROMs and PREMs, with access facilitated by a QR code. However, a paper version should also be provided to avoid digital exclusion among patients.

- The cost of a registry can be reduced through collaboration with a neighbouring country (e.g. Australia and New Zealand, or Germany and Denmark, for acute pain). However, adaptation to the local system is always necessary. (Sweden)
- The data collection process of a registry should be piloted with a small number of services before being generalised to all tertiary pain centres.

Research guidance

There are also examples of international collaboration experiences such as:

- The mission of the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (IMMPACT) is to develop consensus reviews and recommendations for improving the design, execution, and interpretation of clinical trials of treatments for pain.¹¹¹
- Developing a core outcome domain set to assessing effectiveness of interdisciplinary multimodal pain therapy: the VAPAIN consensus statement on core outcome domain (Validation and Application of a patient-relevant core set of outcome domains to assess multimodal PAIN therapy) (VAPAIN).¹¹²

➤ **Key points:** In Belgium, there are several initiatives of registry on various diseases. The prevalence of chronic diseases (Health interview survey) and PROMs & PREMs (PaRIS) are also assessed by Sciensano. However, except the Neuro-Pain registry, all these data collections do not include data on patients with chronic pain. Data on process and structural indicators in tertiary CPC are collected by the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE). At an international level, there are several chronic pain patient registries. They focus on data collected from tertiary pain centres. These registries aim to provide clinicians and CPCs with feedback and support clinical research with real-world data, as well as supporting policymaking and international benchmarking. The success of data collection for a registry depends on the nature and conciseness of the data, as well as the IT solution supporting the collection. It is recommended that data collection is piloted in a small number of CPCs as part of an international collaboration.

Action points proposed for Belgium

Action point 7. Support data collection and research

Action point 7.1. Estimate prevalence and/or incidence of chronic pain in Belgium, if possible, using existing data collections (e.g. extracting the ICD-11 code from medical records, or adding specific questions about chronic pain to the Sciensano national health interview survey).

Action point 7.2. Do not consider creating a registry on chronic pain by starting to collect data from primary care.

Action point 7.3. Assess the need of registry in CPCs

- Before considering a registry in CPCs, the cost of the data collection should be balanced with the added value of the collected data for decision-making purposes.
- If the balance is unfavourable, the data collection performed by the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE) should be supplemented with data on patient outcomes and pathway.
- If a registry of patients with chronic pain treated in a CPC is considered, the definition of the minimum data set should be supported by the international collaboration and be piloted in a small number of CPCs. The registry should be designed to (1) to support clinician with the management of their patients (2) to support hospital managers to assess the performance of their centre based on predefined quality indicators and to learn lessons regarding the BPS care organisation (3) to provide real world data for researchers (4) to provide dashboard to support decision making of health authorities

Action point 7.4. Develop research agenda based on the research questions that have already been identified in Belgium and at an international level, and involve patients and relevant professionals (see sheet Multistakeholder group) in the selection of research topics.

Stakeholder feedback

Action point 7.1. Estimate prevalence and/or incidence of chronic pain in Belgium, if possible, using existing data collections (e.g. extracting the ICD-11 code from medical records, or adding specific questions about chronic pain to the Sciensano national health interview survey).

Acceptability of this action point are very high but feasibility is moderate. Few respondents expressed doubts about the acceptability of the second action point (n=2/36) whereas more are concerned by its feasibility (n=3/36), or declined to comment on its acceptability (n=6/36) or feasibility (n=7/36).

The stakeholders recognize the importance of collecting data to enhance chronic pain management and optimize resource allocation. However, they mentioned that current electronic medical records are not yet suited for this type of data entry, due to differences in coding systems (SNOMED vs ICD-11). Integrating dedicated software modules into medical record systems could be a potential solution.

Other comments are the following:

- It is essential to establish a standardized data collection protocol, including clear definitions and harmonized terminology. This protocol should ensure high-quality data entry, compliance with GDPR regulations, and secure data extraction. Ethical committee approval would also be considered.
- The code ICD-11 is poorly used in practice yet.
- Extracting data from nursing and psychological records is more complex and often not feasible, which limits the scope of data collection.
- Chronic pain in children should also be considered and included in data collection efforts.
- Data could also include information on medication use, particularly drugs related to neuropathy (e.g., gabapentin, pregabalin) and opioids. Analyzing prescription data could serve as a first approach to identifying chronic pain patients treated with medication. This could be complemented by analyzing non-prescription medication data from pharmacy databases.

Action point 7.2. Do not consider creating a registry on chronic pain by starting to collect data from primary care.

Acceptability and feasibility of this action point are low. Many respondents expressed doubts about the acceptability of the second action point (n=16/41) or its feasibility (n=7/41), or declined to comment on its acceptability (n=17/41) or feasibility (n=21/41). The stakeholders emphasised that without organized data collection in primary care, there is a risk of underreporting of chronic pain conditions, which could lead to a distorted picture of chronic pain. Since patients are often referred back to primary care after being treated in pain centres, some stakeholders believe that primary care may be the most appropriate setting to gain a comprehensive view of the chronic pain issue in Belgium. Home care services and palliative care networks should also be involved.

The stakeholders also mentioned some concerns with data collection in primary care, asking for the harmonization of the way data is encoded, ensure its quality, and organize its extraction securely.



Action point 7.3. Assess the need of registry in CPCs

Acceptability of this action point is low and feasibility is moderate. Some respondents expressed doubts about the acceptability of the third action point (n=8/41) or its feasibility (n=5/41), or declined to comment on its acceptability (n=10/41) or feasibility (n=15/41).

While they mentioned that implementing a registry based on CPCs data would help identify treatment patterns, such as distinguishing effective treatment combinations from ineffective ones, the stakeholders emphasized many challenges that hinder this implementation.

- Sufficient financial and human resources are necessary to support this effort.
- Implementation would also require defining the data to be collected, harmonizing practices between centres, and ensuring their quality and regular updating.
- There are already data annually registered by CPC for the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE).
- A registry would only make sense with strong political support, which remains uncertain in the current context.
- There is a risk of administrative burden in CPCs already overloaded.
- This data is already included in the EHR and CoZo. Limited additional questions or parameters can be noted in the discharge letter.
- Another problem is that such a registry would leave out a significant portion of patients, since not all have access to pain centres. This is the top of the iceberg. Conversely, exploiting existing data seems more realistic: it requires coordination efforts, but it is technically feasible and covers a larger population.
- Testing in a limited number of pain centres is not so simple and there are still quite a few things to consider. Funded CPCs and/or centers with experience in data collection? Centres with a research department and/or academic centres? Which (sub)population?

Action point 7.4. Develop the research agenda based on the research questions that have already been identified in Belgium and at an international level, and involve patients and relevant professionals (see sheet Multistakeholder group) in the selection of research topics.

Acceptability and feasibility of this action point are high. Few respondents expressed doubts about the acceptability of the fourth action point (n=4/41) or its feasibility (n=4/41), or declined to comment on its acceptability (n=6/41) or feasibility (n=9/41).

The stakeholders confirmed that patients, healthcare providers, and all professionals involved in chronic pain management should be actively engaged in developing the research agenda and participating in the research itself. This would ensure greater relevance and usefulness of the results. This would also strengthen patients' confidence in research.

In practice, this requires real coordination between the different actors, political will to finance and follow this agenda, and time to organize effective patient participation. It is therefore feasible, but only if specific financial and human resources are allocated to it and if research on chronic pain is recognized as a priority. Some networks of researchers could help (universities, scientific professional organisations as SSMG, the Research Foundation - Flanders (fwo.be)...

There is also one comment that relying on what has already been identified may prevent the emergence of new research topics.

Amended action points

Action point 7. Support data collection and research

Action point 7.1. Estimate prevalence and/or incidence of chronic pain in Belgium, if possible, using existing data collections (e.g. extracting **chronic pain diagnosis the ICD-11 code** from medical records **based on a predefined data extraction protocol, medication consumption in the IMA/AIM data**, or adding specific questions about chronic pain to the Sciensano national health interview survey **that already include overall questions over pain**).

Action point 7.2. Before starting new data collection, elaborate a data collection protocol including clear definitions, harmonized terminology and requirements to ensure high-quality data entry, compliance with GDPR regulations, and secure data extraction.

Action point 7.3. ~~Do not consider creating a registry on chronic pain by starting to collect data from primary care.~~ Assess the need of registry in primary care.

- Before considering a registry in primary, the need of financial and human resources should be balanced with the added value of the collected data for decision-making purposes.
- If the balance is unfavourable, the data collection should be focused on available data (see action 7.1) or on CPC (see action 7.4).

Action point 7.4. Assess the need of registry in CPCs

- Before considering a registry in CPCs, the ~~cost of the data collection~~ need of financial and human resources should be balanced with the added value of the collected data for decision-making purposes.
- If the balance is unfavourable, the data collection performed by the Federal Public Service Health, Food Chain Safety, Environment (FOD VVVL - SPF SPSCAE) should be supplemented with data on patient outcomes and care pathway.
- If a registry of patients with chronic pain treated in a CPC is considered, the definition of the minimum data set should be supported by the international collaboration and be piloted in a small number of CPCs. The registry should be designed to (1) support clinician with the management of their patients (2) support hospital managers to assess the performance of their centre based on predefined quality indicators and to learn lessons regarding the BPS care organisation (3) provide real world data for researchers (4) provide dashboard to support decision marking of health authorities.

Action point 7.5. Develop the research agenda ~~based on~~ **taking into account** the research questions that have already been identified in Belgium and at an international level and involve patients and relevant professionals (see sheet Multistakeholder group) in the selection of research topics.

Objectives of the action points

- To assess the pain burden in Belgium
- To improve pain knowledge of HCPs, patients, policy- and decision-makers and employers
- To generate data for research purposes
- To support the evaluation of quality of care in primary, secondary and tertiary (pain centres) care
- To support the evaluation of social care (e.g. return to work interventions)
- To support the evaluation of quality of education
- To support the development of quality indicators
- To support the definition of relevant research topic

Target stakeholders

- Federal public service: FOD VVVL - SPF SPSCAE
- Data providers such as patients, GPs, other physicians and CPCs
- Policymakers from health, social, education, labour... sectors at federal and federated authorities
- Researchers

Points of attention or required conditions

- The current EMDs are not equipped to handle additional data collection regarding chronic pain due to differences in coding systems. Integrating dedicated software modules could provide solutions.
- The code ICD-11 is poorly used in practice yet.
- Piloting data collection in research should support the collection of real-world data on a larger scale.
- Extracting data from nursing and psychological records is more complex and often not feasible, which limits the scope of data collection.
- The protocol (see action point 7.2) should ensure high-quality data entry, compliance with GDPR regulations, and secure data extraction. Ethical committee approval would also be considered.
- The administrative burden of the data collection for both GPs and CPCs should be minimal.
- Data could also include information on medication use, particularly drugs related to neuropathy (e.g., gabapentin, pregabalin) and opioids. Analysing prescription data could serve as a first approach to identifying chronic pain patients treated with medication. This could be complemented by analysing non-



prescription medication data from pharmacy databases. However, the data on medication consumption may only reflect the number of patients with chronic pain who are treated with reimbursed medication.

- The involvement of home care services and palliative care networks should be considered for data collection.
- Sufficient financial and human resources are necessary to support this effort.
- The use of existing data could be an interesting avenue to explore within the CPCs, but it must be accompanied by greater coordination. Implementation would also require defining the data to be collected, harmonizing practices between centres, and ensuring their quality and regular updating. The proper definition of data for a broader registry might be informed by experience from the Neuro-Pain® registry.
- Clinical research should also consider sociodemographic characteristic variations in patients with chronic pain (e.g. the gender differences in pain management⁸²).
- Research should explore innovative models of care (e.g. care given outside offices of HCPs by building capacities into communities, inclusion of non-HCPs in pain management...)
- Interdisciplinary research centres active in the fields of care and welfare, such as LUCAS in KU Leuven, could be involved in the research process given that it is conducting research into network establishment to achieve effective integrated care.
- Strong political commitment is an absolute prerequisite for enabling implementation both of data collection and research.

1.8 Multistakeholder group

Support a multistakeholder group for pain

Definition

A multistakeholder group is a working group involving stakeholders in supporting the improvements to chronic pain management and including representatives of the full range of health (and social) system decision-makers, HCPs, researchers and non governmental organisations, with patients representatives.

Background

- The multimodal management of chronic pain requires a paramount paradigm shift from the biomedical model towards the biopsychosocial approach. This implies interventions in many areas including patient education, healthcare professionals (HCPs) training, changes in care institutions, adaptations of the financing model... This is a huge challenge that requires involvement of many decision-makers and stakeholders and a strong partnerships between governments, health and social care practitioners from the first to the third line and patients.
 - The literature review showed that a low level of political support may lead to access issues of optimal pain management (including RTW). This can be associated to a lack of credentialed HCPs and centres; obstructing regulations, HCPs discomfort between the patients needs and the organisational pressure...
 - The stakeholders involvement is considered as crucial to interact with the policy-makers. However, the voice of stakeholders is often divided among many associations.
 - In Belgium, there are several HCPs associations focusing on pain (see <https://www.belgianpainsociety.org/pig>) For example, there are "De Vlaamse Anesthesiologische Vereniging voor Pijnbestrijding vzw" (VAVP) which is an association of anesthesiologists from the Dutch-part of Belgium, the "Groupe Régional Interdisciplinaire Douleur" (GRID) which gathers physicians specialised in algology from the French-part, the "Werkgroep Pijnverpleegkundigen" and the "Groupe infirmiers francophones douleur" (GIFD) which gather nurses specialised in pain respectively in the Dutch and the French part of the country). There is also the Belgian Pain Society (BPS) which is described below in the section Proposed solution.
 - There are also many patient associations in Belgium. Five associations focus on pain (four in the Dutch-speaking part of the country, ("Vereniging voor Mensen met Chronische Pijn", "Vlaamse Pijnliga", "Pijnpunt vzw", "t Lichtpuntje" and, a local French-speaking one "Revivre avec") but many others have interest in this topic (such as "Be-Migraine", "Time for Lyme", "My Fibro", "Fibrom'out", "Reumanet"...) (see chapter 4. The current care offer in Belgium in the [scientific report](#)). There are also two federations of patient associations: the "Vlaams Patiëntenplatform" (VPP) for the Dutch part of the country and the "Ligue des usagers des services de santé" (LUSS) for the French part.
 - Since 2012, within the healthcare services of the RIZIV – INAMI, there is a Belgian multistakeholder group for chronic disease in Belgium called 'Het Observatorium voor de chronische ziekten' - 'Observatoire des maladies chroniques'. It has two sections. The scientific section comprises physicians from universities, as well as representatives from professional organisations (including physicians, pharmacists, nurses and allied HCPs), sickness funds (medical advisers and scientific experts) and professional organisations of nursing homes, homes for the elderly and day care centres. It also includes representatives from the Ministry of Public Health and Social Affairs. This section is responsible for defining the management of chronic disease. The consultative section gathers other representatives from sickness funds (research and development, studies department and social services), representatives of organisations representing support associations for persons with chronic disease, and representatives of the Minister of Public Health and Social Affairs. This section assesses the needs of chronic disease patients. The Observatory has an advisor role and is the spokesperson of the interests of people suffering from chronic diseases in dialogue with other stakeholders in the healthcare sector.¹¹³ However, chronic pain is currently not identified as a chronic disease. Even the definition of a chronic disease - a condition that must persist for at least six months - does not correspond to the definition of chronic pain, which is a pain that has persisted for at least three months.
- **Key points:** Stakeholders have a crucial role to play in the political involvement in chronic pain but their voice is fragmented in Belgium among many HCPs and patients associations.



Potential actions

- In the literature review, Wilson et al. highlighted that a working group made up of multiple stakeholders could help raise awareness among policy-makers about chronic pain. Elements of this option could include:
 - establishing a national network of stakeholder groups with a coordinating 'hub';
 - engaging key opinion leaders who can take action,
 - equipping these key opinion leaders (and the stakeholder groups from which they are drawn) with the necessary tools to take action, which may in turn include:
 - compelling data and stories about the current burden of chronic pain and the implications (e.g., costs) of not addressing it;
 - regularly updated, evidence-based packages of care/guidelines for the management of chronic pain at the primary health care level and in related fields of practice;
 - mechanisms to coordinate across fields of practice and across relevant disease groups that are often linked to chronic pain; and
 - periodically identified priorities for new primary and secondary research and the communication of these priorities to relevant funders."

Wilson et al. identified also potential barriers to implementing the multistakeholder group. Firstly, it may be difficult to involve patients in the group since people living with chronic pain may be unwilling (e.g. due to the stigma associated with chronic pain) or unable (e.g. due to the limitations related to having chronic pain) to be meaningfully engaged in these activities. Secondly, HCPs may be skeptical about or unwilling to implement recommendations from a working group. Thirdly, healthcare organisations may be not interested by this working group (either because they already have chronic pain strategies or because they focus on other conditions they consider to have bigger priority). Finally, at the system level, resources available could be too limited to support the development and ongoing activities of a working group.
 - The Belgian Pain Society is the Belgian chapter of the International Association for the Study of Pain (IASP, <http://www.iasp-pain.org>) (see below in the section Existing experiences). The Belgian Pain Society is a multidisciplinary scientific association including physicians and other HCPs (as nurses, physiotherapists, etc.) from the whole country. The goal of BPS is to support education for the treatment of pain, stimulate pain research, improve patient care by creating a network optimized for the correct pain management, and participate in the public health care. However, it does not include patients.
 - Belgian patient associations that were met for discussion (see chapter 2. Objective and methods in the [scientific report](#)) considered as a priority to be involved in the elaboration of pain management policy. They highlighted their expertise and usefulness for decision-makers. They suggested to establish one patient association specific for pain covering the whole French-speaking area since it does not yet exist in 2025. The LUSS is ready to establish and oversee a working group on this topic, bringing together all relevant associations. More appreciation of the role of patient associations (e.g. volunteer compensation) could also lead to more awareness of these organisations. Patients also asked to be involved in the development of guidelines. Belgian chronic pain centres mentioned that patient associations are generally sources of good scientific references but some of them cultivate a feeling of belonging to a caste (the more boxes you tick in terms of symptoms, the better) and do not encourage openness (stimulating the 'no desire to get out of it'). This is also the case with social networks, which can reinforce a feeling of belonging 'outside society' and encourage detachment from social life. They argued for more clarity in the role of patient associations.
- **Key points:** Establishing a national network of stakeholders group is proposed to raise awareness among policy-makers about chronic pain. In Belgium, even if patients associations called for strong patient representation in the elaboration of pain management policy, there is currently no national group gathering HCPs and patients associations.



Existing experiences

Some National Action Plans (Australia, Canada, the U.K.) mentioned the need for developing of a leadership group as one step towards a better management of chronic pain (see sheet National Action Plan). In other countries (as in the U.S., the Netherlands) or at an international level, this kind of group exists and they highlight their mission (without be supported by a National Action Plan. We present below an overview of these different propositions without aiming comprehensiveness.

1. Australia: The National Advisory Council on Pain Management

In the National Strategic Action Plan for pain management 2021, the first action presented was the establishment of a National Plan Leadership Group also called National Advisory Council on Pain Management (NACPM). Its tasks was to inform, support, lead and govern advice provided to the Federal Department of Health and the Minister for Health on the delivery and ongoing evaluation of the Action Plan. This group would:

- identify partnerships, frameworks and resources to deliver the National Action Plan and realise its goals and objectives over the longer term;
- inform future responses to contemporary challenges facing the pain sector and consumers living with pain; and
- be underpinned and directly informed by a Consumer Reference Group that recognises consumers as key partners and involves representatives from across Australia and reflects a consumer-led strategy.

Furthermore, the Plan mentioned that Painaustralia (<https://www.pinaustralia.org.au/>) should be supported "as the national peak pain advocacy body to advocate to decisionmakers and raise awareness across the community to improve quality of life for people living with pain, their carers and families and to minimise the social and economic burden of pain on individuals and the community, as well as convene the NACPM to deliver constructive, unified advice."

Pinaustralia includes health, medical, research and consumer organisations. It was established in 2011 and work with governments, health professional and consumer bodies, funders, educational and research institutions, to facilitate implementation of the National Pain Strategy Australia-wide. It works collaboratively with key stakeholders to elevate pain as a priority in the broader health agenda and to raise awareness of the profound impacts of pain.

2. Canada: Pain Canada

The Canadian Pain Task Force was established in 2019 to provide advice and information to Health Canada to support an improved approach to prevent and manage chronic pain. Its final report "An Action Plan for Pain in Canada" lays out numerous recommendations for targeted actions necessary to improve outcomes for the nearly eight million Canadians living with chronic pain and to reduce pain's impact on families, communities, and society.

Among many other recommendations, the Canadian Action Plan for pain 2021 called for national mechanisms to improve coordination, create community capacity, develop and disseminate pain-related guidance and best practices and also to enable collaboration among governments, regulators and health professional organizations, people with lived experience, non-governmental organizations, researchers, employers, and other stakeholders with a role to play in the Action Plan's implementation.

Pain Canada (<https://www.paincanada.ca/>) is a multi-stakeholder, national initiative made up of the leading pain organizations across Canada. It created new opportunities for action by connecting people, ideas, organizations and resources to enable a national movement. It gathers people living with pain and pain organizations from coast to coast. Researchers, clinical experts and champions on the issue of chronic pain are partners. Pain Canada published a call for action to #PrioritizePain in Canada and support the recommendations formulated in the Action Plan for Pain in Canada and to advocate for their implementation.



3. The United Kingdom

A national stakeholder group is mentioned by the Four Nation Pain Strategy 2022 as one enabler for pain management delivery. This group is expected to include lived experience / patient voice to ensure the overarching framework is fit for purpose, deliverable and agile to respond to changing circumstances.²¹

The British Pain Society (<https://www.britishpainsociety.org/>) is the oldest and largest multidisciplinary professional organisation in the field of pain within the UK. It aims to develop interdisciplinary partnerships between researchers, health and social care professionals, and people experiencing pain to promote the safest and most effective pain management throughout the United Kingdom.

The British Pain Society has six goals: best care, collaborative working, making pain visible, professional excellence, applying research to individualised care and, taking into account diversity of pain.

To reach this six goals, it focuses on six key areas:

- Multidisciplinary Collaboration: Bringing together professionals across disciplines to deliver integrated, inclusive care.
- Education & Training: Expanding learning opportunities for health and care professionals at all career stages.
- Research: Leading inclusive, impactful research through a UK-wide National Pain Research Network.
- Quality Improvement: Raising standards in pain services through data-driven insights and shared best practices.
- Person-Centred Approaches: Empowering people living with pain and ensuring their voices shape everything we do.
- Support for Professionals: Advocating for the well-being, development, and recognition of those working in pain care.

There is a Pain Consortium bringing together the British Pain Society, the Faculty of Pain Medicine and the Chronic Pain Policy Coalition (CPPC). The CPPC is a non-profit organisation which aims to promote policy that improves quality of life for those affected by chronic pain (<https://chronicpainpolicycoalition.wordpress.com/whatwedo/>). The CPPC is quoted by the IASP as an example of broad coalition of stakeholders. The Pain Consortium aims to coordinate on activities and campaigns.

4. The United States of America: The National Pain Advocacy Center

The National Pain Advocacy Center (NPAC) (<https://nationalpain.org/>) is a policy-focused group working for systems level change in the United States of America. NPAC advocates, in accordance with federal and state laws, to advance research, rights, and care for all people with pain.

NPAC is an alliance of scientists and clinicians, public health experts, and people living with pain. It aims to transform the mindsets, systems and policies that impede the health of people living with pain.

5. The Netherlands: PA!N (<https://pijnalliantieinnederland.nl>)

PA!N – Pijn Alliantie in The Netherlands is a national alliance that brings together all stakeholders involved in pain from prevention to diagnosis and treatment. It was created in 2015 when the board of the Dutch Pain Society, gathering the professional associations of pain, took the initiative to move towards a different form of collaboration so that all associations and organisations dealing with pain in the Netherlands are directly involved. PA!N advocates for a multidimensional approach to pain including a clear division of tasks and responsibilities in which the patient is central, using contemporary knowledge and approaches with regard to the prevention, diagnosis and treatment of pain and its consequences. It also aims to position pain on the social and political agenda as a disease and as a focus for structural policy. PA!N provides resources for both patients and professionals. and organizes public events like the PA!N Congress (e.g. the 2025 edition titled "The Future of PA!N").

6. Portugal

The Platform for the Social Impact of Pain in Portuguese Society (SIP Portugal) is an informal, heterogeneous group of national representatives from organisations, scientific societies and patient associations that are concerned with the social impact of pain. The added value of the platform lies in facilitating dialogue between all participants, enabling them to speak with one voice and ensuring greater awareness of the social impact of pain, as well as promoting targeted policies.

In Portugal, the objectives of this Platform are now focused on employment and education. (<https://europeanpainfederation.eu/wp-content/uploads/2024/03/Joint-Declaration-of-the-Platform-for-the-Social-Impact-of-Pain-in-Portugal.pdf>)

7. International level

There are also international associations of stakeholders such as the international Association for the Study of Pain (IASP) and the European Pain Federation (EFIC). The IASP (<https://www.iasp-pain.org/>) brings together scientists, clinicians, health care providers, and policymakers from around the world. It is the leading global organization supporting the study and practice of pain and pain relief. It gather several Special Interest Groups (SIGs) for example in cancer pain, genetics and pain, social aspects of pain, pain education... The EFIC (<https://europeanpainfederation.eu/>) is the European chapter of the IASP. Since its foundation in 1993, EFIC evolved to take a stronger role in the education of clinicians, in furthering pain research and advocacy to support better policies affecting pain. Both IASP and EFIC are professional organisations and are mostly representing the views and interests of health professionals and researchers in the field of pain, not those of the patients.¹¹⁴

At the European level, there is also Pain Alliance Europe, a non-profit organisation based in Belgium, functioning as an umbrella organisation of 40 national and regional associations in 17 European countries, concerned with chronic pain, regardless the underlying condition (<https://pae-eu.eu/>). It represents the voice of patients organisations and people living with chronic pain. Its vision is to create Europe in which chronic-pain patients can have access to the best possible treatment for them.

Pain Alliance Europe has joined EFIC to build a platform called the Societal Impact of Pain (SIP). This multistakeholder platform aims to raise awareness of pain and change pain policies. "The platform provides opportunities for discussion for health care professionals, pain advocacy groups, politicians, healthcare insurance providers, representatives of health authorities, regulators, and budget holders. The scientific framework of the SIP platform is under the responsibility of EFIC and the strategic direction of the project is defined by both partners. The pharmaceutical companies Grünenthal GmbH and GSK are the main sponsors of the Societal Impact of Pain (SIP) platform." (<https://europeanpainfederation.eu/sip/about-sip/>) The SIP brought together National Platforms and stakeholders working in the field of pain to discuss their activities and priorities as summarized in the 2024 report. (<https://europeanpainfederation.eu/advocacy/sip-stakeholder-forum-report/>)

- **Key points:** Several leadership multistakeholder groups focusing on pain exist across the world. Their missions include advocating to policymakers (US, NL, PT, EFIC), raising awareness of the impact of pain (AU, UK, US, NL, PT), delivering (AU) and/or supporting the achievement of NAP goals (AU, CA), encouraging and following research findings (AU, UK), expanding learning opportunities for professionals (UK), stimulating collaboration and shared best practices between professionals (UK, CA), promoting the well-being of workers in the pain sector (UK) and empowering patients (UK). The importance of involving patients as key partners in the process is emphasised.

Proposition of actions in Belgium

Action point 8. Support a multistakeholder working group

Action point 8.1. Formally recognize a Belgian multistakeholder working group gathering people experiencing pain, social and health care professionals, researchers, representatives from universities or university colleges, employers, sickness funds and policy-makers.

The missions of this multistakeholder working group could be to:



- Collect and analyze data on (chronic) pain management in Belgium;
- Raise policy-maker and public awareness on pain and its impact;
- Advocate for pain to be a political priority;
- Develop and support the implementation of actions to improve chronic pain management. These actions could be compiled into a National Action Plan (see sheet National Action Plan);
- Support HCPs trainings;
- Encourage collaboration and sharing of best practices between professional from the health care, social and occupational sectors;
- Define research priorities, encourage the conduct of studies and monitor their results;
- Promote patient empowerment.

Action point 8.2. Establish sufficient conditions to allow this group to function.

Certain conditions must be met to ensure the effective operation of this group such as:

- Basing the group composition on existing Belgian associations (such as the “Observatorium voor chronische ziekten - Observatoire des maladies chroniques” if a specific section “pain” is created);
- Ensuring balanced linguistic representation of patients representatives in the working group;
- Identifying within the group of key opinion leaders who can take actions, including in communication, in order to improve pain management;
- Equipping the group with the necessary resources to be efficient, which may include :
 - Material and financial support to dedicate time and energy to this work;
 - Technical support for the communication between the group members (e.g. platform, hub)
 - Compelling data and stories about the current burden of chronic pain in Belgium and the implications (e.g. costs) of not addressing it (see sheet Data collection and research);
 - Compelling data and stories about the successful management of chronic pain (see sheet Data collection and research).

Stakeholder feedback

Action point 8.1. Formally recognize a Belgian multistakeholder working group gathering people experiencing pain, social and health care professionals, researchers, representatives from universities or university colleges, employers, sickness funds and policy-makers.

Acceptability of this action is very high. Few respondents expressed doubts about the acceptability of the first action point (n=2/42) or its feasibility (n=5/42), or declined to comment on its feasibility (n=3/42).

- The stakeholders agree that a multi-stakeholder group would allow for more coherent, representative and cross-functional coordination, by integrating the voices of patients, the field, social services and care. Such a group would make it possible to recognize chronic pain as a public health priority and bring more consistency to actions. This has been required by patient associations for quite some time.
- This approach appears feasible, as analogous initiatives have demonstrated success in other domains. For instance, All.Can Belgium—focused on cancer care—effectively convenes patients, caregivers, policymakers, and other stakeholders to enhance the quality and efficiency of care delivery. This model illustrates the potential for multi-stakeholder collaboration to generate meaningful impact.

However, the stakeholders express also some concerns:

- The question of which forum is most suitable for this still deserves discussion. There is already the SIP (societal impact of pain);
- It is crucial to make sure that all stakeholders are represented: pain centres and pain physicians, second and third line hospital structures, patients. Contrary, it is important to not include political groups.
- Both federated entities should collaborate (and agree). This implies to work in at least two and even three languages.



- An important challenge is the complex coordination, possible administrative burden and the risk of slow decision-making due to divergent interests.
- Success depends on clear governance, efficient processes, and sufficient resources. A clear mandate, transparent decision-making, and sustainable funding will be prerequisites for ensuring impact and continuity. The need for financing is highlighted both by patients and HCPs who consider it is a question of respect to be paid for their time and involvement.
- The group should work in coherence with other policy plans (integrated care, e-health, hospital financing and nomenclature reform, etc.). Belgian institutional complexities could complicate the approach, but the cancer example shows that such an approach is possible if properly supported.
- A political will is paramount to support the action of the group.
- There is a risk that if the group bears so much responsibility and requires so much material and financial support, people who participate will be those who are no longer involved in clinical practice.
- This could also be a temporary structure responsible for developing a national action plan for chronic pain, if implemented.
- The efficacy of the group should be assessed.

Action point 8.2. Establish sufficient conditions to allow this group to function.

Acceptability and feasibility of this action are high. Few respondents expressed doubts about the acceptability of the second action point (n=3/42) or its feasibility (n=3/43), or declined to comment on its acceptability (n=2/42) or feasibility (n=6/43).

The proposed conditions appear to be useful. Few comments are added by the stakeholders.

- The consideration of placing such a working group within the Observatory for Chronic Diseases has sense, but its implementation depends on a number of preconditions and the precise design of the working group.
- The need for sufficient resources and the opposition to the usual volunteer allowance is reminded. The group legitimacy depends on the mobilization of various opinion leaders: professionals or researchers recognized for their scientific credibility, patient representatives for the social and 'real-life' dimension, and people capable of influencing decision-makers to ensure a political impact. It is this combination of means and profiles that would give it its strength and effectiveness.

Amended action points

Action point 8.1. Formally recognize a Belgian multistakeholder working group gathering people experiencing pain, social and health care professionals, researchers, representatives from universities or university colleges, employers, sickness funds and policy-makers.

The missions of this multistakeholder working group could be to:

- Collect and analyze data on (chronic) pain management in Belgium;
- Raise policy-makers' and public awareness on pain and its impact;
- Advocate for pain to be a political priority;
- Develop and support the implementation of actions to improve chronic pain management. These actions could be compiled into a National Action Plan (see sheet National Action Plan);
- Support HCPs trainings;
- Encourage collaboration and sharing of best practices between professional from the health care, social and occupational sectors;
- Define research priorities, encourage the conduct of studies and monitor their results;
- Promote patient empowerment.

Action point 8.2. Establish sufficient conditions to allow this group to function.

Certain conditions must be met to ensure the effective operation of this group such as:



- Basing the group composition on existing Belgian associations (such as the the 'Observatorium voor chronische ziekten-Observatoire des maladies chroniques' if a specific section "pain" is created);
- Ensuring balanced linguistic representation of patients representatives in the working group;
- Identifying within the group of key opinion leaders who can take actions, including in communication, in order to improve pain management;
- **Providing a clear mandate and transparent decision-making for ensuring impact and continuity.**
- Equipping the group with the necessary resources to be efficient, which may include :
 - Material and financial support to dedicate time and energy to this work;
 - Technical support for the communication between the group members (e.g. platform, hub)
 - Compelling data and stories about the current burden of chronic pain in Belgium and the implications (e.g. costs) of not addressing it (see sheet Data collection and research);
 - Compelling data and stories about the successful management of chronic pain.

Objectives of the action points

- To increase pain knowledge of decision makers and other stakeholders involved in policy definition.
- To define patient needs and support decision makers in defining priorities, objectives and resources for improving the chronic pain management in Belgium.
- To improve coordination between health and social care professional, create community capacity, develop and disseminate pain-related guidance and best practices
- To stimulate collaboration among governments, regulators and health professional organizations, people with lived experience, non-governmental organizations, researchers, employers, and other stakeholders with a role to play in the management of chronic pain.
- To monitor the implementation of policy decisions.
- To identify priorities for new primary and secondary research and the communication of these priorities to relevant funders.

Target stakeholders

- Patients and patient associations
- Health care professionals
- Social professionals
- Researchers
- Universities or university colleges representatives
- Labor sector representatives
- Sickness funds representatives
- Decision-makers (at federal and federated entities level)

Points of attention or required conditions

- It is crucial to make sure that all stakeholders are represented: pain centres and pain physicians, second and third line hospital structures, patients. However, people living with chronic pain may be unwilling (e.g. due to the stigma associated with chronic pain) or unable (e.g. due to the limitations related to having chronic pain) to be meaningfully engaged in these activities. Contrary, it is important to not include political groups.
- Both federated entities should collaborate (and agree). This implies to work in at least two and even three languages.
- An important challenge is the complex coordination, possible administrative burden and the risk of slow decision-making due to divergent interests.
- HCPs may be skeptical about or unwilling to implement recommendations from a working group.
- The group should work in coherence with other policy plans (integrated care, e-health, hospital financing and nomenclature reform, etc.). Belgian institutional complexities could complicate the approach, but the cancer example shows that such an approach is possible if properly supported.



- There is a risk that if the group bears so much responsibility and requires so much material and financial support, people who participate will be those who are no longer involved in clinical practice.
- The consideration of placing such a working group within the Observatory for Chronic Diseases has sense, but its implementation depends on a number of preconditions and the precise design of the working group.
- The efficacy of the group should be assessed.
- At the system level, resources available could be too limited to support the development and ongoing activities of a working group.
- It must be considered that patience will be required in the process of making progress.



1.9 National Action Plan

Prepare a National Action Plan for pain

Definition

National Action Plans (NAPs) are policy documents created by governments at a country level to accelerate, institutionalise and better coordinate efforts to respond to certain challenges. NAPs define priorities, objectives to be reached and actions to be taken. Sometimes, steps are described for a predefined period of time (<https://www.inami.fgov.be/fr/themes/esante/plan-d-action-interfederal-esante-2025-2027>). Several governments can be implied in NAP development and achievement: federal and federated authorities but also different sectors as healthcare, environment, education...

NAPs are also a means for civil society and stakeholders to engage in consultation with, provide input, track and assess the actions of the government in implementing its commitments (<https://www.ihrb.org/resources/what-are-national-action-plans-naps>).

Background

- The multimodal management of chronic pain requires a paramount paradigm shift from the biomedical model towards the biopsychosocial approach. This implies interventions in many areas including patient education, healthcare professionals (HCPs) training, changes in care institutions, adaptations of the financing model... This is a huge challenge that requires involvement of many decision-makers and stakeholders and a strong partnerships between governments, health and social care practitioners from the first to the third line and patients.
- However, the literature review showed that health authorities used to focus on broad issue domains (e.g. chronic disease) rather than on specific issues. Pain is rarely considered as a disease entity in itself. Several stakeholders from Belgium and abroad have confirmed this issue and highlighted the fact that "pain is not sexy" for policy-makers and other decision-makers (and clinicians).
- This political lack of awareness and the related low level of political support may lead to access issues of optimal pain management (including the return to work). For example, they can result in a lack of credentialed HCPs and centres, obstructing regulations or HCPs discomfort between the patients' needs and the organisational pressure.(literature)
- The Canadian Pain Task Force (CPTF) assessment and consultation phases in 2020 showed a consensus on both the gaps and the remedies to improve the management of chronic pain. They concluded that what was needed to build or amplify the existing interventions and to address current gaps and inequities is national policy, resources and coordination across governments, regional health authorities, and the stakeholder community.⁶
- In Belgium, many actions were already taken to improve pain management such as the federal funding of certain chronic pain centres, the implementation of multidisciplinary algological teams in hospital or the recognition of nurses specialisation in pain but this is clearly not sufficient to ensure optimal management of chronic pain. There is currently no Belgian National Action Plan for Pain and to date, pain has not been a key consideration in national health policy strategies and frameworks. In 2025, eight priority objectives for health in Belgium were defined by the Commissie Gezondheidszorgdoelstellingen - Commission pour les objectifs en matière de soins de santé". (Press release 14/04/2025): Among these 8 objectives of healthcare, two are transversal (1. Better data collection and sharing; 2. Increase efficacy which means that they are in a continuous interaction with the 6 other priority domains 3. Better organisation of the primary care, better coordination between primary, secondary and tertiary lines, multidisciplinary team and population management ; 4. Patient centeredness; 5. Better financial access and less inequity; 6. Reform in the health profession; 7. Sensibilisation, prevention and screening; 8. Specific attention to dental care and mental health). Several of these objectives are useful for improving the management of chronic pain and are mentioned in other part of this report.
- In the interviews with patient associations, the need for a recognition of chronic pain as unique pathology/disease was cited as a acknowledgement of the experienced suffering. However, labelling chronic pain patients as sick is controversial because of its referral to a more biomedical approach. Chronic pain has a significant neurobiological component, but the argument that chronic pain is a disease requires not only that this biological component is present, but that it is causal. Ballantyne et al., 2022¹²³ argued that narrowing down chronic pain to a disease process suggest the wrong therapeutic target and may undermine patients' ability to manage their own pain. It is why chronic pain should not be considered as a disease but rather as

a form of human suffering that requires for a wide range of responses, including a more comprehensive approach. In line with these findings, the wording for unique pathology/disease has been changed to a distinct health condition.

- Belgian patient associations mentioned a lack of involvement from politicians in their “regarding pain and they request political attention for patients suffering from pain.

➤ Key point: Political involvement in pain management is both paramount and challenging.

Potential actions

According to the Kingdon’ theory, an issue will only be placed on the political agenda if a window of opportunity opens. This window of opportunity arise when 3 streams converge : the problem becomes “problematic”, the solutions become visible, and the political context becomes favorable. These 3 streams are currently present in Belgium.

This present study highlighted the problematic and potential solutions but the political involvement is lacking.

Wilson et al. proposed three options for engaging health system decision makers in supporting comprehensive chronic pain management: an advocacy campaign, a multistakeholder working group and chronic pain policy foci. Here, we focus on the third one, as the first two are covered in other sheets (sheets ‘Public awareness’ and ‘Multistakeholder group’).

One way to mark the policy’s focus on pain is to elaborate a National Action Plan. It is the last domain of actions proposed by this study as it encompasses all the others, like a global supportive intervention.

We summarize here the proposals as mentioned in the literature and during the discussion with Belgian patient associations [Patient association] and the healthcare professionals (HCPs) from some Belgian chronic pain centres [CPC]. (See chapter 2. Objective and methods in the [scientific report](#))

- Wilson et al. suggested to start by mapping which existing policy portfolios are relevant to supporting chronic pain management, particularly at the primary healthcare level, and then establish an integrated portfolio or a coordinating role that would work across other relevant portfolios and departments.⁶
- Belgian patient associations do not mention the need for a national action plan but they appeal to each policy-maker to take into account those who will be affected by any political decision. They ask policy decisions that support patient care centred on individual needs with quality criteria imposed on healthcare professionals to encourage them to work in this direction. They request as a priority that chronic pain is recognised as a chronic health condition its own right. ICD-11 code already exists for pain, but it appears it is not yet recognised in Belgium. Recognition per diagnosis versus recognition as a chronic pain patient (independent of diagnosis) is considered as paramount so that there is also uniformity in reimbursement systems (e.g. physiotherapist). Patient associations also call for politicians to attend their conferences when invited which does not currently happen.[Patient association]
- Belgian chronic pain centres (CPCs) strongly requested national actions. They proposed going outside the healthcare system and asked for including health representatives in each ministry, in order to address the fact that some of the population’s distress originates from how the society functions socially and professionally. Because impact on the “psyche” is a risk factor for chronicity (from childhood), the CPCs would like to encourage a less anxiety-provoking society, including in the health care system (e.g. the announcement that the long-term sick people will return to work is an example of a message that shocks and frightens patients with chronic pain). They highlighted the need of the biopsychosocial and genuine interdisciplinarity (not just between physicians) in all health care policies (Public Health, RIZIV-INAMI...). They asked also for more global actions to encourage maintain and return to work.[CPC]

➤ Key points: Belgian stakeholders are calling for political involvement and policies that extend beyond the healthcare system. One proposed strategy to increase political involvement in pain management is the elaboration of a National Action Plan. This encompasses all the other actions points.

Existing experiences

In Belgium, several National Action Plans are currently on-going involving the healthcare sector such as the Interfederal Action Plan eHealth 2025-2027¹¹⁵, the Belgian “One Health” National Action Plan on the fight against antimicrobial resistance (AMR) 2020-2024 (https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/en-



amr_one_health_national_plan_final_0.pdf), the Belgian Sepsis National Actions Plan (Be-SNAP)¹¹⁶, the third National Environment-Health Action Plan (NEHAP) for 2023-2029¹¹⁷ or the National Action Plan 2022-2027 for improving the workers wellness during their duties¹¹⁸. These examples demonstrate how Belgium could develop a National Action Plan for pain management and how they generate political acknowledgement (and attention in the press).

Several countries have published a NAP for pain management these last years. We present here some interesting experiences (Australia, the United States of America, Canada, the United Kingdom, Denmark and Italy) which can be useful for Belgium without aiming comprehensiveness^j. We summarize also some recommendations formulated by the International Association for the Study of Pain (IASP).

1. Australia: the first country with a National Pain Strategy (<https://www.painaustralia.org.au/>)

In 2010, Australia was the first country in the world to develop a national framework for pain, which provides a blueprint for the treatment and management of acute, chronic and cancer pain. Based on this framework, in May 2018, the Australian Government announced support for the development of the first ever National Strategic Action Plan for Pain Management (the Action Plan). The Action Plan sets out the key priority actions to improve access to, and knowledge of best practice pain management. Painaustralia, the national peak body working to improve the quality of life for people living with pain, has consulted widely with patients, clinicians, allied health practitioners, researchers, experts and the whole community to understand what people think the key priorities are for the Action Plan. These consultations have confirmed the need for action and nationally coordinated policy setting.

The overarching goal of the Action plan is to improve quality of life for people living with pain and to minimize the pain burden for individuals and the community.

Recommendations are clustered around eight goals:

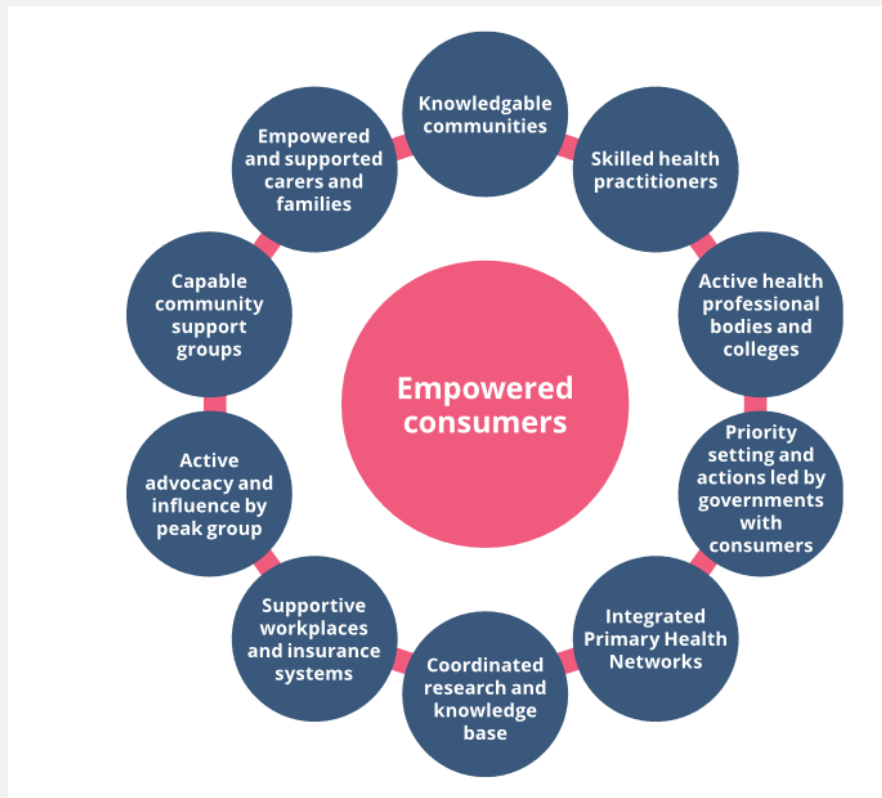
1. People living with pain are recognised as a national and public health priority. Three objectives:
 - Pain is understood as key public policy priority by policy-makers.
 - Pain is included in other key national health and economic strategies, policies, plans and frameworks, particularly chronic conditions frameworks, being brought forward by governments or health and medical groups.
 - Future pain policy is underpinned by frameworks that ensure actions are evaluated and that pain is included in future priority setting.
2. Consumers, their carers and the wider community are more empowered knowledgeable and supported to understand and manage pain.
3. Health practitioners are well-informed and skilled on best practice evidence-based care and are supported to deliver this care.
4. People living with pain have timely access to consumer-centred best practice pain management including self-management, early intervention strategies and interdisciplinary care and support.
5. Outcomes in pain management are improved and evaluated on an ongoing basis to ensure consumer-centred pain services are provided that are best practice and keep pace with innovation.
6. Knowledge of pain flourishes and is communicated to health practitioners and consumers through a national research strategy.
7. Chronic pain is minimised through prevention and early intervention strategies.
8. People living with pain are supported to participate in work and community.

The delivery of this Action Plan required commitment and priority setting at all levels of government and by key partners including not-for profit organisations, researchers, the private sector, individuals and communities.¹¹⁹

The Figure 4 below presents the goals aimed for each group of actors.

^j For example, we can mention other plans in Portugal (<https://europeanpainfederation.eu/sip-news/plans-against-pain-in-portugal/>) or in France (<https://www.sfetd-douleur.org/plans-douleur/>) but we found no evaluation.

Figure 4 – Key Partnerships and participants to deliver action plan



Source: Australian Government Department of Health. National Strategic Action Plan for Pain Management. 2021.¹¹⁹

Ten priority actions were defined during the consultation process:

1. Establish a National Pain Leadership Group
2. Encourage the Council of Australian Governments (COAG) Health Ministers to endorse the Action Plan
3. Organize community awareness campaign
4. Develop interactive national website and app to provide a 'one stop shop' for information and resources
5. Include pain management in accreditation standards for health providers
6. Establish a National Institute of Pain Research
7. Provide an overarching education strategy for health practitioners
8. Map and review pain services by location and needs analysis
9. Recognize pain as a complex condition in its own right for the purposes of Medicare Benefits Schedule (MBS)^k rebates
10. Determine a single validated assessment and monitoring tool for chronic pain

These high priority actions have been guided by principles of assessment including ensuring they:

- Have the greatest positive impact for consumers
- Will be the most effective investment of efforts and resources
- Ensure consumers and carers are given a strong voice
- Are evidence based and meet principles of best practice pain management
- Can be widely supported and endorsed
- Deliver on the goals of the National Pain Strategy or meet a newly identified goal
- Meet unmet need
- Have the support of key enablers.



2. United States of America: The national pain strategy

In 2010, the National Institutes of Health (NIH) contracted with the Institute of Medicine (IOM), currently named National Academy of Medicine (NAM), to undertake a study and make recommendations “to increase the recognition of pain as a significant public health problem in the United States.” The resulting 2011 IOM report “Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research” recommended the development of “a comprehensive population health-level strategy” to address these issues. A national pain strategy (NPS) was published in 2015. The strategy focused on six areas : population research, prevention and care, disparities, service delivery and reimbursement, professional education and training, and public awareness and communication.

Critical first steps to implement the NPS have occurred including the following:

- Publication and endorsement of a set of core pain competencies for prelicensure interprofessional education;
- Development of training materials and curricula for primary care pain providers and communication aids for patients, behavioral health, and opioid treatment directories;
- Pilot studies to assess coverage policies and parameters for treatment of low back pain;
- A series of population-level studies on pain prevalence, pain-related disability, and use of services;
- A Web-based educational modules aiming at transforming health sciences pain education.

In 2019, Gross and Gordon published an assessment of the National Pain Strategy and mentioned several strengths (e.g. emphasis on core competencies, team-based care and transformation in payment models) and opportunities (e.g. integration of interdisciplinary core competencies in educational accreditation standards) but also weaknesses (e.g. data lacking on prevalence, onset, course and impact on outcomes of pain treatments) and threats (e.g. real-life time constraints of providers).¹²⁰

3. Canada: the action plan for pain

The Canadian Pain Task Force (CPTF) was established in 2019 to provide advice to guide the federal government toward an improved approach for the prevention and management of chronic pain.¹²¹ In December 2020, the Task Force mandate was strengthened and accelerated to provide recommendations on priority actions. The recommendations presented in an Action Plan in May 2021 build on system improvement efforts underway in federal, provincial, territorial, and regional jurisdictions. The Plan lays out specific and targeted actions necessary to improve outcomes for people living with chronic pain and to reduce its impact on families, communities, and society. Recommendations are clustered around six primary goals:

1. Enable coordination, collaboration, and leadership across Canada
2. Improve access to timely, equitable, and patient-centred pain care
3. Increase awareness, education, and specialized training in pain
4. Support pain research and strengthen related infrastructure
5. Monitor population health and health system quality
6. Ensure equitable approaches for populations disproportionately impacted by pain

As the members of the Canadian Task Force wrote in 2021: “Addressing chronic pain requires multiple and diverse approaches to change, from policy and regulation to changes in programs, practices, and attitudes. It will require broad engagement and depend on perseverance, collaboration, commitment, leadership, and resources.”¹²¹

The center of the figure shows the overall outcome the action plan hopes to achieve. This outcome will be enabled with a focus on four main goals related to improving access, education, research, and surveillance as well as foundational goals underpinning all recommendations that include attention to equity for different populations and coordination, collaboration, and leadership across Canada.¹²¹

^k MBS is a listing of the Medicare services funded by the Australian Government

After this publication in 2021, a multi-stakeholder initiative “Pain Canada” created new opportunities for action by connecting people, ideas, organizations and resources to enable a national movement (<https://www.paincanada.ca/>). It is made up of people living with pain and pain organizations from coast to coast.

An online interactive tool to monitor the progress towards implementing the recommendations was also developed. The status of each recommendation is labeled as either ‘Not Started’ (with no known action taken to implement it), ‘In Progress’ (with initiatives underway towards eventual completion), ‘Ongoing’ (with initiatives underway towards an open-ended goal), or ‘complete’ (<https://actionplan.paincanada.ca>).

However, according to Canadian experts, the implementation of the National plan is far from achieved. (personal communication)

4. The United Kingdom: Four Nation Strategy for Pain Management

In 2022, the Faculty of Pain Medicine of the Royal College of Anaesthetists published, with the support of many stakeholders, a document providing an overarching framework to deliver improved pain management across the whole healthcare sector. By overarching framework, “It outlines a delivery system with national standards but incorporates regional and local implementation making best use of current facilities whilst ensuring equality of care for all, wherever they may live.” “It suggests opportunities for service integration, new ways of working, best use of funds with the patient at the centre of the process at both individual and population levels. It includes opportunities for health prevention and health promotion, social care, support to live with pain and support networks for those living in pain.” A description of the key components of the framework is available in the sheet Care pathway.

Some enablers for delivery the integrated pathway are proposed by the authors of the four Nation Pain strategy.²¹ Those situated at the national level are particularly interesting in this chapter. They are the following:

- Named lead for integrating pain across frameworks and policy developments as they relate to each of the devolved nations.
- Collaboration across the domains of: health promotion and prevention, primary care, long-term conditions and secondary care.
- Develop a national stakeholder group including lived experience / patient voice to ensure the overarching framework is fit for purpose, deliverable and agile to respond to changing circumstances.
- Develop a public health strategy to support people to live well with pain.
- Support regional teams in the development of a framework coordinating pain services.
- Support mapping of pain complexities by setting up national registries and gathering evidence through collaborative research with various national research bodies.
- Promote communication between research bodies to deliver meaningful research.

In 2025, the Faculty of Pain Medicine published a gap analysis of the pain services across the U.K compared with the [Core Standards for Pain Management Services in the UK](#). This analysis is based on a survey with 97 valid responses, mostly from secondary care (74%), followed by tertiary care (23%) and finally primary care (3%). No standard was fully met by all pain services and several needs were identified (for example in pediatric pain, cancer pain, PROMS and research). The support of psychologists within the service, training for physicians and pain specialists, access to specialist treatments which act directly on the nerves to alleviate pain (neuromodulation), and online information and consultation facilities for patient are issues that deserve national attention.¹²²

5. Denmark : A national strategy

In July 2022, the Danish Ministry of Health published the document “Strategy for the pain area - a national strategy directed at people with chronic pain” which contained five initiatives¹¹⁴:

1. Recommendations for organization and measures in the area of pain : objective = to support early and appropriate assessment and better organization of the collaboration between sectors (i.e. not only healthcare but also labor market, social services...).
2. National clinical recommendations for assessment and treatment of people with chronic pain”: objective = to develop national clinical recommendations for specific interventions that support general practitioners in assessing and treating people with chronic pain better and faster.
3. Improved inclusion of patients with chronic pain: objective = to give patients a better bio psycho social insight to their own illness in order to facilitate more patient empowerment (with strengthened dialogue between



patients and health professionals and a more uniform approach to people with chronic pain between municipality and primary care). In order to facilitate this, the initiative aims to develop a national PRO - patient reported outcome questionnaire (see sheet Data collection and research). The PRO-questionnaire will be stored in the national questionnaire bank enabling all parties across the healthcare system to use and collect data from patients with chronic pain. The objective of registration and PRO-data is not only to qualify clinical work but also to be used in research

4. Raising awareness about chronic pain: objective = increasing the well-being of people with chronic pain by preventing taboo and stigmatizing via an awareness campaign based on the previous campaign from 2020 "Busting myths about chronic pain" (see sheet [Public awareness](#)).
5. Increased quality through professional collaboration: objective = to reinforce the propagation and implementation of the new recommendations..

In addition to the 5 initiatives mentioned in the pain plan, The National Health Authority has been working on updating the existing guidelines in the field of pain. In the fall of 2022, 120 clinical guidelines were submitted for consultation with a wish for fewer but more specific and up-to-date recommendations.

According to Lars Bye Møller from the Danish Association of Chronic Pain Afflicted FAKS¹, some barriers were already highlighted in front of these initiatives.¹¹⁴ For example, the general practitioners expressed concern about the large volume of people concerned by the clinical recommendations for assessment and treatment, in particular the screening tool. The expanding number of diagnoses and tasks versus the shortage of time in general practice is an issue. Furthermore, the initiatives in the national pain plan fall under the legislation of healthcare only and not for example the rules and organizations of the social care system (with sometimes sectors working against each other).

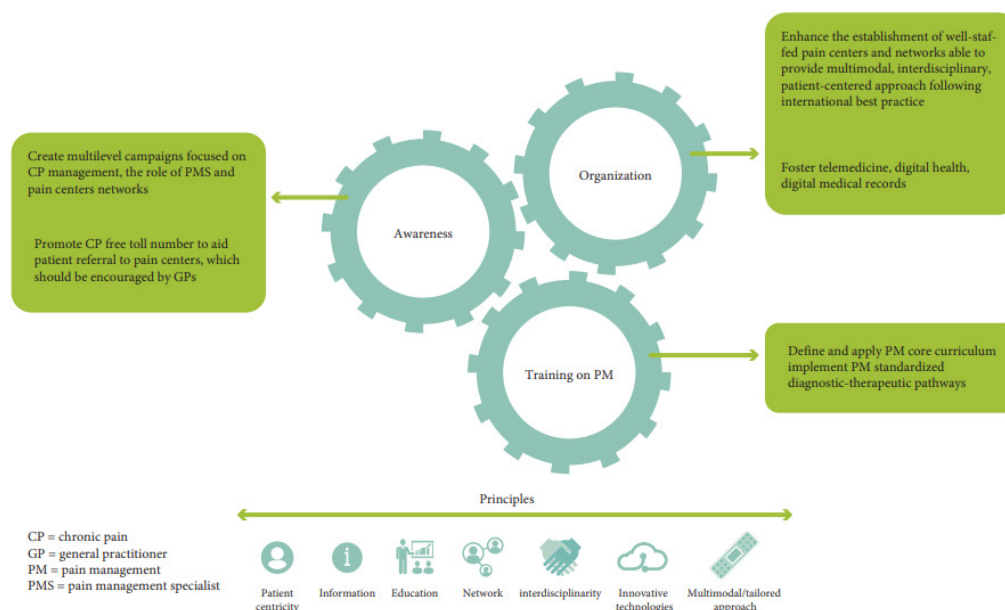
6. Italy: provision of pain treatment priorities of the Italian National Health Plan

In Italy, the Law 38/2010 recognized pain management as a legal obligation and recommended the development of pain therapy centers as well as ensuring the continuity of the diagnostic–therapeutic pathway. However, in December 2023, results of a specific survey on pain were published in the Rapporto Censis Grüenthal called "Vivere senza dolore" (Live without pain). These results showed that very few achievements appear to have been obtained in terms of chronic pain relief in the population but also in the use of interdisciplinary BPS approach.⁷ It is also worth noting that the National Chronic Disease Plan, created to harmonize the different interventions by sharing a strategic plan with Italian Regions, does not include chronic pain as a chronic disease.⁷

In 2025, three experts published an analysis of the data from "Vivere senza dolore" Rapporto Censis Grüenthal and formulated several propositions to improve the management of chronic pain in their country. As presented in the Figure 5 below, three areas of interventions are identified by the authors: public awareness, HCPs training and care organisation.

¹ FAKS - Foreningen af Kroniske Smerteramte (<https://faks.dk/>)

Figure 5 – Analysis of the data from “Vivere senza dolore” Rapporto Censis Grünenthal



Source: Violini A, Consoletti L, Finco G. Chronic Pain in Italy: Turning Numbers Into Actionable Solutions. *Pain Res Manag.* 2025;2025:3401242.⁷

7. International Association for the Study of Pain (<https://www.iasp-pain.org/advocacy/iasp-statements/desirable-characteristics-of-national-pain-strategies/>)

In 2011, the International Association for the Study of Pain (IASP) made an international survey on the obstacles to improvement in pain management through policy initiatives and government interventions. Based on the consultation and analysis performed (29 answers from 28 different countries), the IASP formulated some recommendations in the context of national plan strategies (<https://www.iasp-pain.org/advocacy/iasp-statements/desirable-characteristics-of-national-pain-strategies/>)

Any strategy should consider four broad areas:

- Pain Education for both HCPs and the public (in basic science of pain, assessments of the needs of a person in pain, best practice in the management of pain)
- Coordination of the care system to ensure timely access to the right support: model of care emphasizing BPs, multidisciplinary, timely care, self-management, special attention to specific population (e.g., learning difficulties, dementia) and involvement of family and caregivers.
- Monitoring and Quality Improvement program to address access and standards of care: access times, feedback from patient, quality of life, economic burden of pain.
- Reasonable proportion of direct and dedicated funding for pain research: Epidemiology and implementation science, especially in the area of knowledge transfer.

IASP also found that some key actions seem to enable development of health care policy and strategy. Five critical factors were identified:

- Gathering of evidence on the burden of pain to the nation: As chronic pain is often initially associated with other disease processes, it is frequently recorded incorrectly both in clinical records and in the administrative coding, which is used as a source for epidemiological studies. Nations should carry out a basic health survey that specifically asks questions about pain, its management, and its impact. This data could be used as a baseline from which to measure the impact of any introduced interventions. This information can then inform a plan to deliver change.



- Gathering of information on access to care: The recent IASP task force on waiting times has allowed a clear consensus to develop on standards for appropriate waiting times. The National Pain Audit in the United Kingdom is currently measuring this with English and Welsh government sponsorship.
 - Development of government policy on pain services: Goals for improvement, as laid out above, are agreed by a wide range of stakeholders including central government and prioritized appropriately. It is noted that the impetus for this effort in two nations has occurred through the holding of the United States and Australian Pain Summits, respectively.
 - Formation of a broad coalition of stakeholders: Examples of this are the UK Chronic Pain Policy Coalition, Pain Australia, and the European Federation of IASP Chapters (EFIC).
 - Realistic timelines are established for achieving incremental change: The impact of such change should be measured in terms of both process and outcome. Population outcome data together with process measurements need to be established and agreed upon.
- Key points: Several countries have developed and implemented NAP for the pain management. These plans cover many domain of actions such as patient empowerment (AU), care pathway with timely access to appropriate pain management (AU, IASP) and equity (CA), including prevention, early intervention, patient centeredness, patient education, RTW (AU, CA), collaboration strategies between lines of care and services (UK, DK), HCPs training (AU, US, CA, IT, IASP), guidelines (DK) and accreditation standards (AU), sufficient financing and resources (AU), public awareness (AU, US, DK, IT, IASP), evaluation of outcomes (AU, CA, DK, IASP) and research (AU, US, CA, UK, DK, IASP), leadership group (AU, CA, UK, IASP). Implementation of the NAP is sometimes followed but rarely assessed.

Action points proposed for Belgium

Action point 9. Prepare a National Action Plan on Pain

To improve the multimodal management of pain in Belgium, it is recommended to develop a National Action Plan for pain. This development should:

Action point 9.1. Establish an integrated strategy in pain management for federal and federated authorities from the health and other sectors such as education, social affairs, labour, etc. according to the concept of health in all policies.

Action point 9.2. Define a protocol agreement ('protocolakkord'- 'protocole d'accord') between the federal and federated authorities for the elaboration and implementation of the national action plan.

Action point 9.3. Take into account the action domains identified by this study and formulate objectives and supporting means for these actions i.e.:

- Patient centeredness and empowerment of patients with a particular attention to vulnerable population
- Care pathways integrating multiple levels of health and social care, including the maintain to work and return to work.
- Effective collaboration between health and social care professionals
- Appropriate financial model
- HCPs training, guidelines and tools
- Data collection and research
- Public sensibilisation on pain and health promotion
- Multistakeholder working group for pain

Action point 9.4. Use enablers to facilitate involvement of policy-makers such as:

- Emphasizing the burden of chronic pain in health and social care;
- Highlighting the potential cost savings of multimodal management of chronic pain from reduced hospitalisations, surgeries, medication dependency and sickness leaves;
- Defining national objectives but also allowing territorial approach;
- Starting with actions of low-profile change that can demonstrate how it can work;
- Establishing realistic timelines for achieving change;
- Monitoring the implementation of the plan by measurement and follow-up of both process and outcomes.



Stakeholder feedback

Action point 9.1. Establish an integrated strategy in pain management for federal and federated authorities from the health and other sectors such as education, social affairs, labour, etc.

Acceptability of this action is high but feasibility raises more questions. Few respondents expressed doubts about the acceptability of the first action point (n=2/37) whereas more are concerned by its feasibility (n=6/37). Few declined to comment on its acceptability (n=1/37) or feasibility (n=3/37).

The stakeholders agree on the utility of this action. An integrated strategy is essential to overcome the current fragmentation between the levels of power and between sectors. Chronic pain clearly illustrates the need for a cross-disciplinary approach: it affects the body and mind, health, social issues, education, employment, and daily life. Limiting thinking to the health sector alone reduces the effectiveness of actions and increases patient isolation. On the contrary, linking these dimensions helps restore meaning, strengthen the coherence of interventions, and combat the tendency to fragment and individualize problems, which further weakens the affected people.

A national pain action plan would show there is a strong political will to take this topic into account.

However, there are some concerns mentioned by the stakeholders.

- It depends clearly on the political will. In Belgium, such an integrated strategy remains difficult to implement due to institutional fragmentation and divisions between levels of power (e.g. federal and federated entities). Some propositions have been formulated several years ago by the Belgian Pain Society in its white book but without any impact. However, it would be feasible, as similar approaches already exist for other chronic conditions, such as diabetes or cardiovascular diseases. Chronic pain currently lags significantly behind in these areas: applying a similar approach would help fill this gap and better recognize pain as a public health priority.
- It is important that all sectors (health, social, employment, education...) will be involved in its development and it is not sure that all will be available for this, certainly in the current economic climate.
- This will require time and financing. The white book from the Belgian Pain society could be used as a first draft of the plan.

Action point 9.2. Define a protocol agreement ('protocolakkord' - 'protocole d'accord') between the federal and federated authorities for the elaboration and implementation of the national action plan.

Acceptability of this action is high but feasibility raises more questions. Some respondents expressed doubts about the acceptability of the second action point (n=2/37) or its feasibility (n=6/37), or declined to comment on its acceptability (n=3/37) or feasibility (n=6/37).

According to the stakeholders, without a clear agreement between federal and federated entities, there is a risk that initiatives will remain scattered and ineffective. Chronic pain requires a coordinated approach, as is already the case for other chronic conditions where national plans or protocols exist. It is essential to clarify roles, ensure consistency of actions and guarantee shared political commitment between levels of power.

Recognizing pain within such a framework would allow it to be given the place it deserves among public health priorities.

In theory, this would be feasible, as protocol agreements already exist for other health issues.

There is a link with the integrated care plan and the preparation of intergovernmental programs for integrated care.

However, as with other proposals, the main obstacle remains institutional fragmentation and the difficulty of obtaining clear and lasting political commitment. History teaches us that protocol agreements often take a long time and get bogged down in compromises. There is a need for a next phase in state reform with homogeneous powers for the different entities in all areas of health care.

Action point 9.3. Take into account the action domains identified by this study and formulate objectives and supporting means for these actions i.e.:

- Patient centeredness and empowerment of patients with a particular attention to vulnerable populations
- Care pathways integrating multiple levels of health and social care, including the maintain and return to work.
- Effective collaboration between health and social care professionals
- Appropriate financial model
- HCPs training, guidelines and tools
- Data collection and research



- Public sensibilisation on pain and health promotion
- Multistakeholder working group for pain

Acceptability of this action is very high and feasibility is high. However, some respondents expressed doubts about the feasibility of the third action point (n=2/37), or declined to comment on its acceptability (n=1/37) or feasibility (n=6/37).

According to the stakeholders, this action is not only acceptable but even desirable. All important points are identified. Patients are waiting for these recurring observations to finally be translated into concrete objectives accompanied by means, which would give coherence and strength to the entire approach. Patient associations mention that their involvement could save significant time on the research and working group component. The program would be directly implementable given the research activities and data collected by certain associations, sometimes for decades.

Some stakeholders highlight the challenges of this action such as:

- Time and resources will be necessary to realize so many objectives. A few results could be reached at short term.
- Pain is not a solitary concern in the health care field: proposals should be weighed against other health needs in terms of funding.
- The plan should be not only based on this study but also on other evidence.
- Improvement measures should be identified and followed up.(see action point 9.4)

Action point 9.4. Use enablers to facilitate involvement of policy-makers such as:

- Emphasizing the burden of chronic pain in health and social care;
- Highlighting the potential cost savings of multimodal management of chronic pain from reduced hospitalisations, surgeries, medication dependency and sickness leaves;
- Defining national objectives but also allowing territorial approach;
- Starting with actions of low-profile change that can demonstrate how it can work;
- Establishing realistic timelines for achieving change;
- Monitoring the implementation of the plan by measurement and follow-up of both process and outcomes.

Acceptability and feasibility of this action are very high. Few respondents expressed doubts about the feasibility of the fourth action point (n=1/37), or declined to comment on its acceptability (n=1/37) or feasibility (n=4/37).

According to some stakeholders, this action is very important. The number of people living with chronic pain is increasing exponentially, now also affecting young adults and even adolescents. Without rapid and coordinated action, society risks considerable human and economic costs: young lives weakened from the start, increased sick leave, lost productivity, healthcare overload, and increased precariousness. Clear and powerful messages, emphasizing the scale of the problem and the benefits of multimodal care, are essential to mobilize decision-makers and prevent the situation from worsening further. Be careful, however, that the message is neither caricatured nor stigmatizing.

The proposition is considered as very ambitious and it is suggested to start with small change actions and continue over the long term. Of course this will depend on the political will. Patient associations propose their support.

Finally, it is paramount to start with a definition of goals and hard endpoints. If a national plan is developed, follow-up (both process and outcome) will have to be part of the plan – the importance of evaluation cannot be overstated.

Amended action points

Action point 9.1. Establish an integrated strategy in pain management **in the form of a national pain action plan** for federal and federated authorities from the health and other sectors such as education, social affairs, labour, etc.

Action point 9.2. Define a protocol agreement ('protocolakkord'- 'protocole d'accord') between the federal and federated authorities for the elaboration and implementation of the national action plan.

Action point 9.3. Take into account the action domains identified by this study and formulate objectives and supporting means for these actions i.e.:

- Patient centeredness and empowerment of patients with a particular attention to vulnerable populations.
- Care pathways integrating multiple levels of health and social care, including the maintain and return to work.
- Effective collaboration between health and social care professionals



- Appropriate financial model
- HCPs training, guidelines and tools
- Data collection and research
- Public sensibilisation on pain and health promotion
- Multistakeholder working group for pain

Action point 9.4. Use enablers to facilitate involvement of policy-makers such as:

- Emphasizing the burden of chronic pain in health and social care;
- Highlighting the potential cost savings of multimodal management of chronic pain from reduced hospitalisations, surgeries, medication dependency and sickness leaves;
- Defining national objectives but also allowing territorial approach;
- Starting with actions of low-profile change that can demonstrate how it can work;
- Establishing realistic timelines for achieving change;
- Monitoring the implementation of the plan by measurement and follow-up of both process and outcomes.

Objective of the action points

The objective of a Pain National Action Plan is to improve the policy support for the implementation of a multimodal approach to chronic pain management in Belgium, through the commitment of policy-makers at various levels (federal and federated authorities in health, social, education, labour, etc.).

Target stakeholders

Policy-makers from health, social, education, labour... sectors at federal and federated authorities.

Points of attention or required conditions

- Barriers such as other political priorities, institutional fragmentation, lack of interest from the policy-makers or lack of financing to support a new plan can hinder the development of a Belgian NAP for pain management.
- Inconsistency in the interpretation of policy is a risk that emphasise the need of deeply prepared discussions and clear redaction of documents.
- Implementation of each actions points is challenging as it is mentioned in the other actions described in this study.
- Be careful, however, that the message is neither caricatured nor stigmatizing and avoid potential unconscious bias in communication, pain assessment and treatment regarding minorities¹⁰⁶⁻¹¹¹, social status¹¹² or genders¹¹³.
- Patient associations propose their support.
- It is paramount to start with a definition of goals and hard endpoints. If a national plan is developed, follow-up (both process and outcome) will have to be part of the plan – the importance of evaluation cannot be overstated.



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