McMaster University | Health Forum

Evidence Brief

Enhancing policies and programs to support injured workers with chronic pain in Canada

4 & 5 December 2024

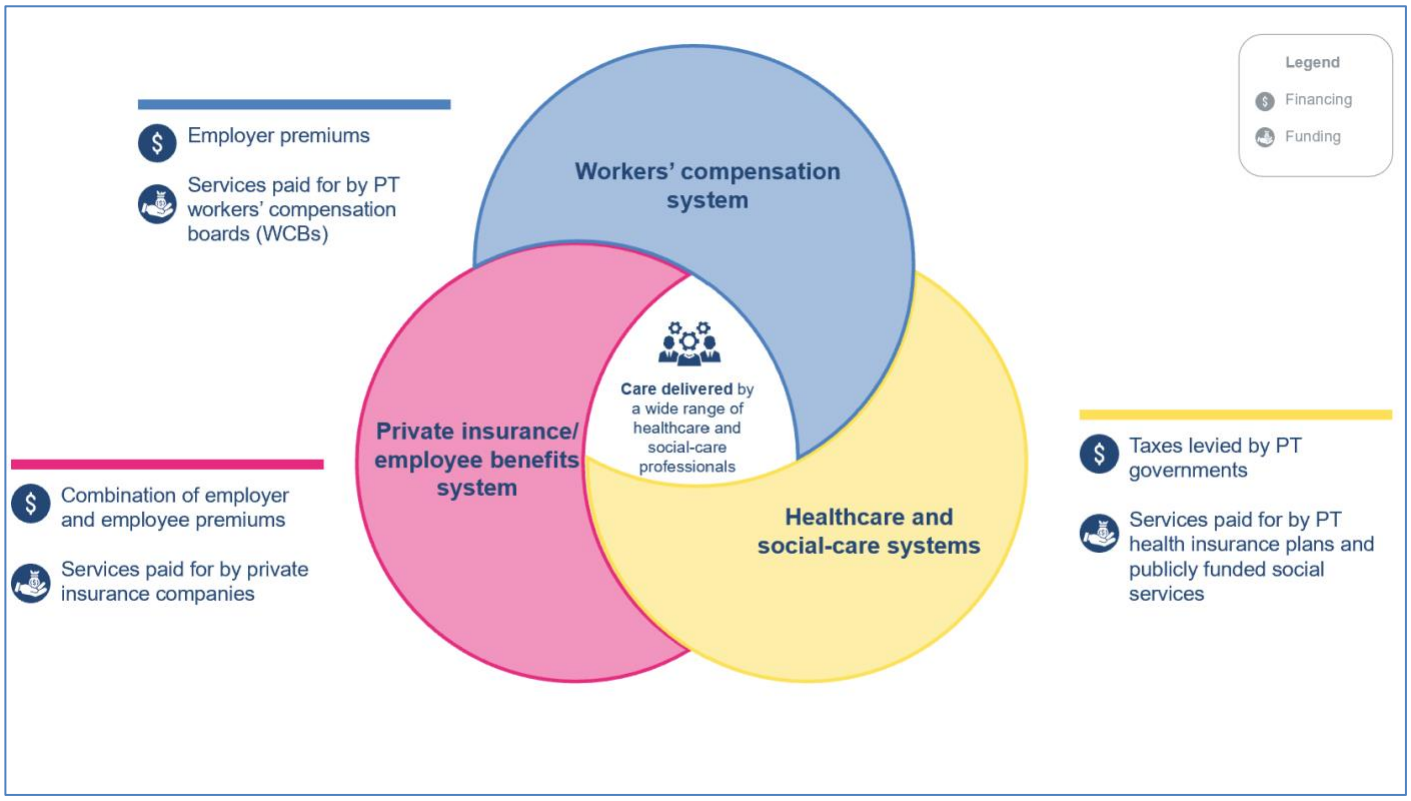
Context for the brief

Nearly 8 million Canadians live with chronic pain, half of whom have lived with it for more than 10 years, and two-thirds of whom experience it as being moderate to severe.(1-4) Despite its prevalence and the growing awareness of the negative impact it can have, chronic pain was only recently recognized in the 11th edition of the World Health Organization's International Classification of Diseases (ICD-11) as a diagnosable condition in its own right. In ICD-11, **chronic primary pain** is defined as "pain in one or more anatomical regions that persists or recurs for longer than 3 months, is associated with significant emotional distress and/or significant functional disability and the symptoms are not better accounted for by another diagnosis," and **chronic secondary pain** is defined as a condition that arises as a result of another underlying health condition.(5)This updated definition acknowledges the complex range of contributing biological, psychological, and social factors that contribute to the condition.(6)

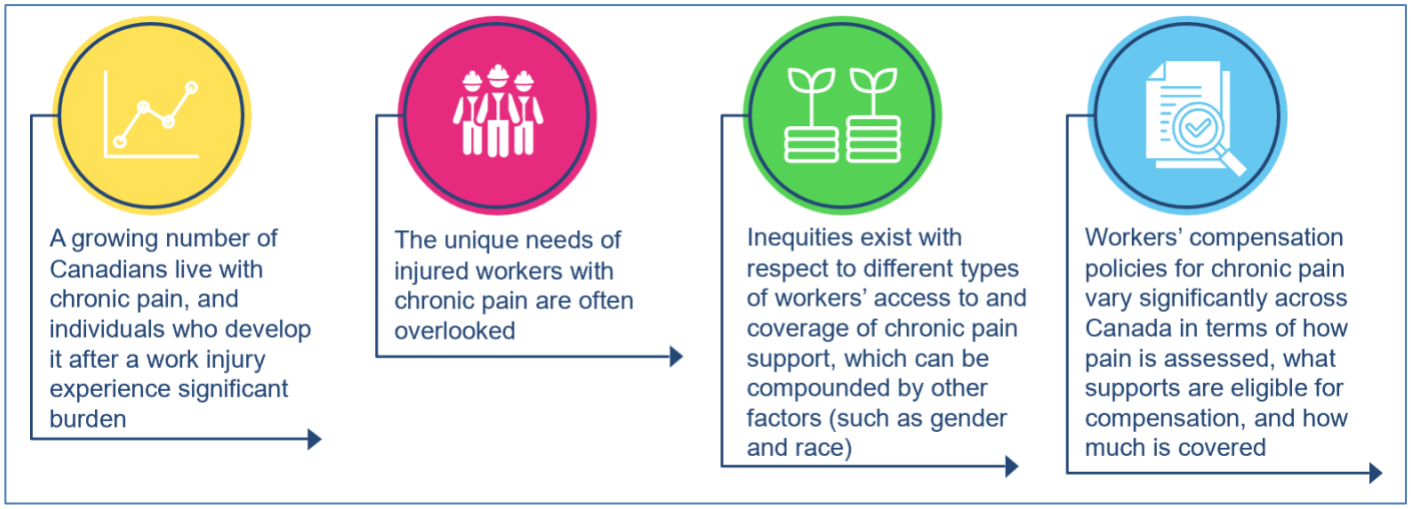
Living with chronic pain can affect all aspects of an individual's life,(7; 8) and for working-age Canadians this includes aspects of their employment and their ability to take part in the workforce. Injured workers who develop chronic pain face unique challenges,(9) and navigate three separate systems to access the supports they need to live with and manage their pain (see Figure 1). These systems vary significantly across Canadian provinces and territories (PT), meaning that where a worker gets hurt and develops chronic pain matters.

This evidence brief was developed with the aim of informing a stakeholder dialogue about enhancing policies (including but not limited to workers' compensation policies) and programs to support injured workers with chronic pain in Canada. It draws on the best-available research evidence, insights from key informants, and a jurisdictional scan to clarify the key problems underpinning the issue, elements of a potentially comprehensive approach for addressing them, and implementation considerations. Details about how the evidence brief was prepared are included in Appendix 1. The brief builds on a contextualized evidence synthesis prepared by the McMaster Health Forum in early 2024 that focused on examining the features and impacts of workers' compensation policies for chronic pain on health, social, and economic outcomes, and the calls to action laid out in the Canadian Pain Task Force's Action Plan for Pain in Canada. The scope of this brief does not include the unique aspects of supporting Veterans or active members of the Canadian Armed Forces with chronic pain. The brief also attempts to position the issue so that potential solutions are not considered a 'zero-sum game,' despite the different perspectives, interests, and values held by the many stakeholders involved in or likely to be affected by decisions taken about the issue; these stakeholders include government policymakers, health- and social-system leaders, organizational leaders (including those from workers' compensation boards, labour organizations, and unions), and professional leaders.

Figure 1: Systems injured workers rely on for chronic pain supports



The problem



A growing number of Canadians live with chronic pain, and individuals who develop it after a work injury experience significant burden

The first component of the problem can be understood in relation to three issues:

- there are high and rising rates of chronic pain among Canadians
- chronic pain is costly to individuals, their families, and to Canadian society as a whole
- injured workers with chronic pain experience lasting negative impacts on their health and well-being, which can create financial challenges for the systems designed to support them.

There are high and rising rates of chronic pain among Canadians

Estimates indicate that 9 million Canadians will be living with chronic pain by 2030.(10) If left unmanaged, many of these individuals will experience poorer overall health and well-being, and for some it could increase their likelihood of experiencing poverty, homelessness, and even suicide.(8) There are a range of factors contributing to whether an individual develops chronic pain, as well as how they experience it such as:

- biological factors (e.g., extent of illness or injury, genetics)
- psychological factors (e.g., anxiety, fear, guilt, anger, depression)
- social factors (e.g., support systems, work environment, access to care, culture and beliefs)

making the assessment, diagnosis, and management of chronic pain complex.(7; 8)

Chronic pain is costly to individuals, their families, and to Canadian society as a whole

Chronic pain can lead to negative economic outcomes at multiple levels:

- At the individual and family level, studies have estimated the median economic burden for Canadians living with chronic pain – from a combination of drivers such as out-of-pocket healthcare costs and an inability to work productively – to be as high as $1,462 per month.(11)
- At the societal level, the negative economic impact of chronic pain is growing, with estimates of direct (e.g., healthcare) and indirect (e.g., lost production) costs expected to grow to between $52 and $55 billion annually by 2030, which is a 36 percent increase from 2019.(10)

Injured workers with chronic pain experience lasting negative impacts on their health and well-being, which can create financial challenges for the systems designed to support them

There is a case to be made that injured workers with chronic pain should be a population that is prioritized given the extent to which available studies indicate they shoulder a significant burden. For instance, a 2022 cohort study of injured workers receiving benefits in Ontario found that:

- 70% of injured workers experience pain 18 months post-injury, a level that is six times higher than those experiencing pain in the general population
- injured workers with 'mild' chronic pain are three times as likely to remain on workers' compensation benefits for at least a year, and those with severe pain are nine times as likely to remain on benefits
- 28% of injured workers with mild pain and 56% with severe pain still require healthcare services at 18 months post-injury, compared to only 6% of injured workers who reported having no pain.(9)

Furthermore a study of injured workers in Alberta found that those surveyed scored significantly lower than the general population on scores related to chronic pain and health-related quality of life, with the lowest overall health status reported by those requiring chronic pain supports.(12)

While we weren't able to identify publicly available data and reporting of chronic-pain-related claims across PT workers' compensation boards (WCBs), some estimates suggest that the cost of claims resulting from lost time due to chronic pain is nearly $19 billion annually in Canada.(13) Taken together, the studies cited above and these estimates indicate that injured workers with chronic pain carry significant financial implications for WCBs across the country.

The unique needs of injured workers with chronic pain are often overlooked

This second component of the problem includes three main issues:

- there is increasingly interest in improving the health and social supports made available to individuals living with chronic pain in Canada
- injured workers with chronic pain seldom get enough focused attention, and the supports made available to them reflect this
- many healthcare and social-care professionals are not equipped to support workers with chronic pain.

There is increasingly interest in improving the health and social supports made available to individuals living with chronic pain in Canada

Several initiatives signal progress towards, and widespread interest in, improving health and social systems for Canadians living with chronic pain:

- Health Canada set up the Canadian Pain Task Force in 2019, which released the Action Plan for Pain in Canada in 2021 to set out a broad vision and recommend next steps for improving health and social supports for Canadians living with chronic pain
- Pain Canada was established to help drive progress towards achieving the goals laid out in the Action Plan, through monitoring the implementation of recommendations and ongoing engagement of key stakeholders
- the Canadian Institutes for Health Research's Strategy for Patient-Oriented Research renewed funding for the country's largest network of impact-oriented chronic pain researchers – the Chronic Pain Network.

Collectively, these initiatives aim to improve Canadians' access to 'gold standard' treatments (e.g., multidisciplinary and interprofessional pain clinics) (14), better coordinate the delivery of services (which often take place across multiple settings that span health and social systems) (8; 15), and reduce direct and indirect costs for Canadians living with chronic pain.(8)

The unique challenges faced by injured workers with chronic pain seldom get enough focused attention, and the supports made available to them reflect this

Despite progress made in advancing support for chronic pain in general, the specific needs of injured workers are often overlooked, including in how healthcare and social-care supports for chronic pain are designed. This is reflected in the available research evidence, which focuses more generally on chronic pain management (not specific to injured workers), work transitions (not always specific to chronic pain), and return to work (again, not always specific to chronic pain) – rarely zeroing in on the needs of injured workers living and working with chronic pain.(16; 17) Additionally:

- little attention has been paid to the important role played by employers and insurers as part of a comprehensive strategy to improve chronic pain supports for injured workers in Canada (10)
- there is a lack of information about how employers can best help with key tasks such as filling out injury reports, contacting insurance boards, and reassuring their employees they will be key supports in the process (18; 19)
- there is poor understanding about how workers' compensation policies may be designed to improve outcomes.(20)

The lack of attention on the unique needs of injured workers with chronic pain may result in them not receiving the supports they need early on, when the development of chronic pain may be prevented altogether. It may also lead to:

- return to work earlier than recommended by healthcare and social-care providers, as workers grapple with balancing their own well-being with the need to earn an income
- re-injury, ongoing stigma and challenges with co-workers, reduction in working hours, employment instability, and associated stress and income precarity.(19; 21-23)

The challenge of assessing the causal impact of a workplace injury on an individuals' subsequent development of chronic pain further complicates the situation,(17) potentially contributing to confusion about which system and which providers should be relied on to provide an injured worker with healthcare and social-care supports for their chronic pain.

Many healthcare and social-care professionals are not equipped to support workers with chronic pain

The need to strengthen professionals' knowledge and skills related to pain assessment and treatment is well established.(8; 10; 24; 25) Chronic pain continues to be poorly understood as a condition in its own right (including the mechanisms that underpin it). It can be stigmatized both by members of the public and among healthcare and social-care professionals, and too little emphasis is placed on improving public awareness or on training and licensing healthcare and social-care professionals in ways that enable them to support individuals with chronic pain.(10)

Additional complexities are introduced when considering how professionals may need to support workers with chronic pain, which could include:

- conducting assessments of an injured workers' chronic pain and impairment, which has implications on what services they can access and from whom
- providing comprehensive and coordinated support, which requires knowledge of what is available to them across three systems (see Figure 1), and considering the many socio-economic aspects of their condition (e.g., how it is impacting their employment and family dynamics).

Inequities exist with respect to different types of workers' access to and coverage of chronic pain support, which can be compounded by other factors (such as gender and race)

Two equity-related dimensions should be considered as part of the problem. First, certain types of jobs present unique challenges for injured workers in need of chronic pain support:

- Occupations more likely to be filled by newcomers to Canada are often precarious in nature, have a higher proportion of workers who aren't familiar with how provincial health and social systems work, and lack representation from labour organizations and unions; these newcomers may also encounter cultural and language barriers when trying to access available healthcare and social-care supports for chronic pain (e.g., filling out claims). These factors can exacerbate the mental and social stressors associated with navigating the systems that provide chronic pain support.(19; 26)
- Occupations that carry a greater risk of injury than others (e.g., if they are highly physical or repetitive) may have unmodifiable functions due to the physical requirements of a job (e.g., building and construction and other forms of manual labour), which has implications for supporting workers living and working with their chronic pain.
- Occupations that are linked to smaller businesses may have employers without the capacity (including time and resources), knowledge, or skills to support employees who are injured and who develop chronic pain.(16; 19; 27-30)

Second, biological, psychological, and social factors unique to each individual worker can make the challenges associated with accessing support for chronic pain even more difficult to overcome. For example:

- fewer men seek care for pain than women, and despite having a higher overall burden of chronic pain, women's pain-related symptoms are often overlooked or minimized (31; 32)
- Indigenous populations are disproportionally affected by chronic pain and have the highest prevalence in Canada among adults (8; 33; 34), with the experience of physical pain often secondary to emotional pain resulting from racism, colonization, premature death of kin, dispossession, dislocation, and community violence.(35).

Workers' compensation policies for chronic pain vary significantly across Canada in terms of how pain is assessed, what supports are eligible for compensation, and how much is covered

The final component of the problem relates to the variability in how systems are set up across the country to support injured workers with chronic pain. In short, where someone works and gets hurt matters. As shown in Figure 2, WCBs in several jurisdictions do not have an explicit policy for chronic pain. Those with an explicit policy vary in terms of how chronic pain is defined (see Figure 3, which is based on findings from a jurisdictional scan included in Appendix 2), with no jurisdiction aligning with the ICD-11 definition. Additionally, there are differences in who oversees assessments of an injured worker's chronic pain, their entitlement to benefits, and the extent of that coverage. For example, the compensation rate for chronic pain, as set by WCBs, sometimes has design features that differ significantly as compared to other forms of functional impairment (e.g., a flat rate of 2.5% for permanent disability instead of a rate tied to the level of functional impairment) (see Appendix 2 for additional details). Overall, this matters in the lives of injured workers with chronic pain in Canada because it creates unequal access to supports across the country.

Figure 2: Workers' compensation boards in Canada with chronic-pain-specific policies

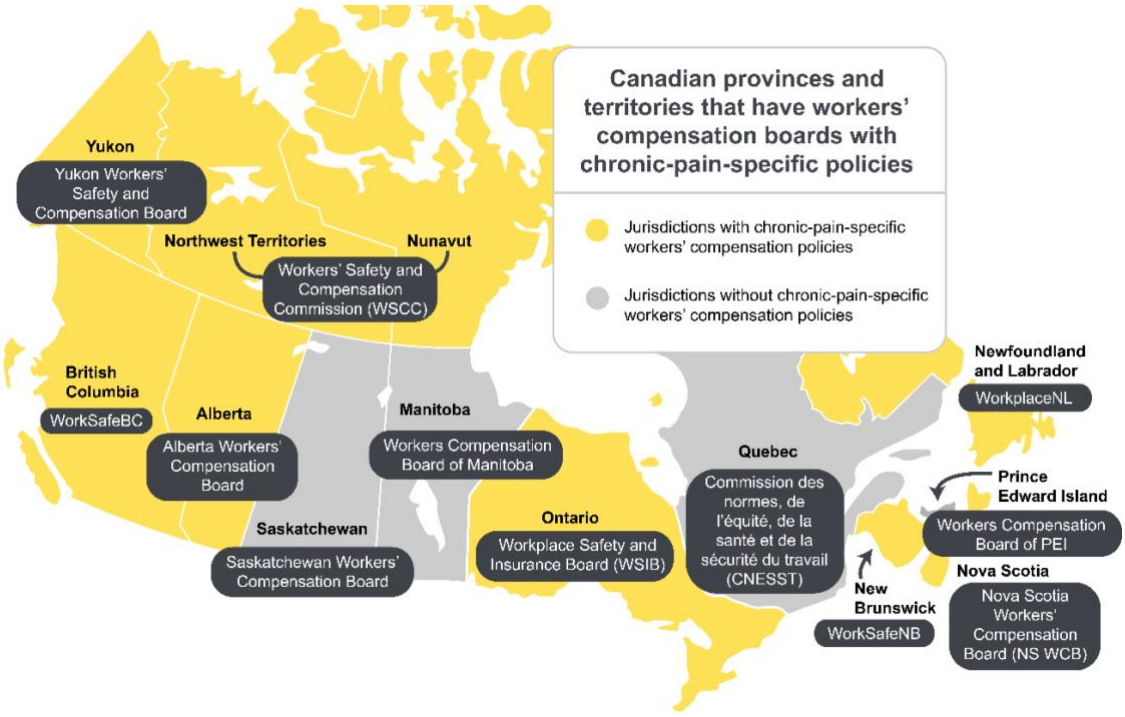
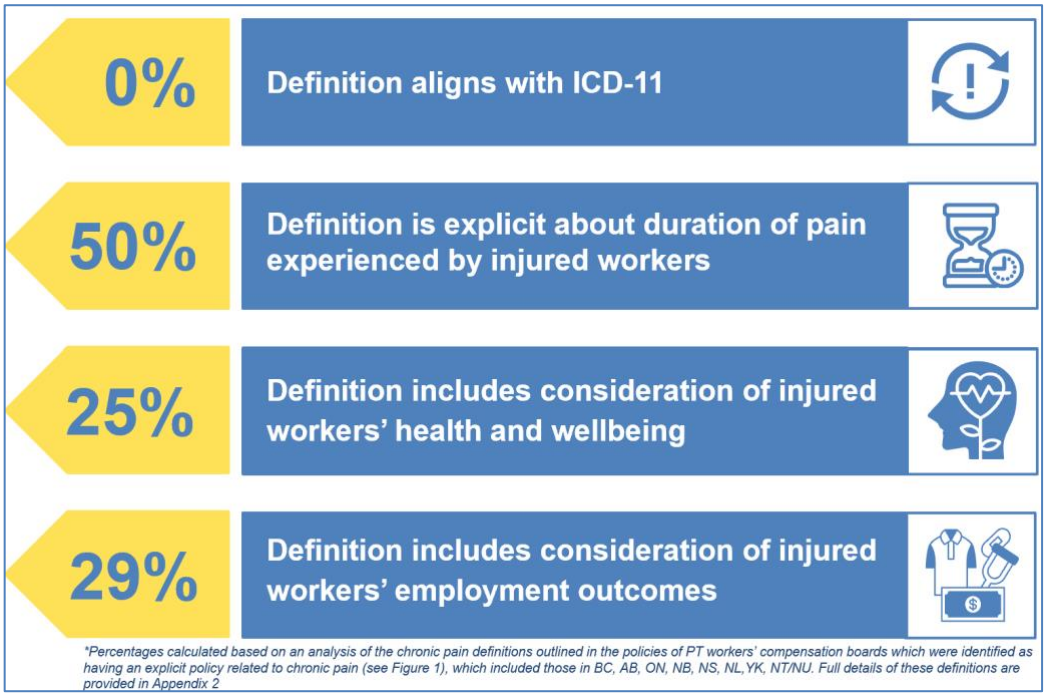


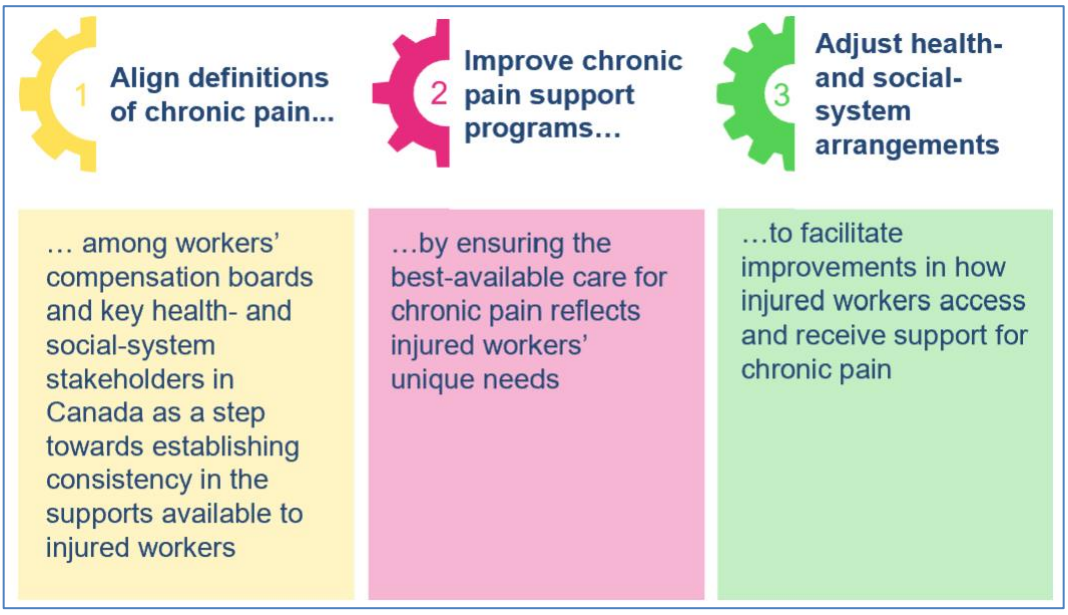
Figure 3: Features of definitions among workers' compensation boards in Canada with a chronic pain policy



Making matters more challenging are the fundamental differences in how supports for injured workers with chronic pain are viewed across the three systems that provide support: whereas the workers' compensation and private insurance/employee benefits systems adopt a targeted adjudication and claims-management lens with the ultimate goal of supporting return to work and minimizing functional limitations, the health and social system adopts a broader health and well-being lens. These differing views may create negative perceptions among injured workers about the motives of insurers and the health and social professionals providing them with WCB-funded care (e.g., believing that their only goal is to 'get them off' benefits).

Elements of a potentially comprehensive approach for addressing the problem

Three elements of a potentially comprehensive approach to address the problem were developed and refined through consultation with the Steering Committee and key informants who we interviewed during the development of this evidence brief.



1 Align definitions of chronic pain

This element focuses primarily on aligning definitions of chronic pain across all key health- and social-system stakeholders – including government policymakers, system and organizational leaders (including those leading labour organizations and unions), professionals, and employers – and among WCBs in Canada to promote consistency across jurisdictions in Canada. This element could include one or more of the following sub-elements:

- **identifying an appropriate organization or group to act as a secretariat for efforts to advance this work across the country through outreach, engagement, and convening key stakeholders**
- **finding a common definition of chronic pain that can be adopted across the country** by either:
  - collaboratively identifying an existing definition (e.g., the ICD-11) that would meet the needs of all stakeholders
  - co-developing a Canada-specific shared definition of chronic pain – with input from workers, employers, government policymakers, system and organizational leaders, and professional leaders – that WCBs could build on to improve access to supports
- **getting 'buy in' and building consensus among key stakeholders for the definition** (e.g., through a structured approach to gather and distil opinion using surveys, such as a modified Delphi process)
- **developing a 'road map' that outlines the ways in which jurisdictions can proceed with adopting and implementing the consistent definition** (e.g., by adjusting legislation, changing how WCBs support individuals with chronic pain).

We identified 14 evidence syntheses that, while not perfect matches to the sub-elements, provided insights that are relevant (see Appendix 3), including:

- the notion that centres of excellence (i.e., organizations with specialized expertise, infrastructure, and strategic leadership capacity) may be a logical starting point for efforts to align definitions in a collaborative way (36)
- findings that indicate co-design and collaboration processes across system stakeholders hold promise for establishing shared goals (such as aligning definitions) (37; 38), and should be:
  - informed by best evidence and frameworks to provide structure (37; 39-41)
  - built on trust and mutual respect (39; 42) and facilitated by formal and informal communication (39; 43)
  - adequately funded and positioned to support stakeholders from equity deserving groups (39; 42; 43)

  - grounded in efforts to meaningfully and actively engage people with lived experience (39; 41-44)
  - driven by strong organizational leadership (38; 41; 43; 45)
- methods are available to systematically and transparently achieve consensus, such as qualitative focus groups, small-group deliberations, modified Delphi processes, the RAND method, and surveys (46; 47), but these processes all have limitations.(44; 45; 47; 48)

2 Improve chronic pain support programs

This element would aim to ensure that the best available care for chronic pain reflects injured workers' unique needs by improving existing programs and services. Sub-elements of this approach could include:

- **ensuring existing chronic pain programs have in place the right mechanisms for supporting injured workers as they recover from an injury and learn to live and work with chronic pain**; for example:
  - integrating holistic approaches to chronic pain treatment and management
  - enabling self-management for chronic pain
  - making available psychological and alternative therapies
  - providing knowledge support and education about living and working with pain
- **integrating complementary supports for injured workers that enable them to resume or continue paid work**; for example:
  - supporting workers' development of a dynamic work plan, and establishing a flexible and supportive working environment (building on existing initiatives like IDEA, which focus on developing employer-facing practices for accommodation among workers with various disabilities)
- **ensuring healthcare and social-care professionals have the knowledge and skills to provide the best chronic pain care for injured workers**; for example:
  - ensuring they are up-to-speed about best practices related to chronic pain management, with a particular focus on the unique challenges injured workers face when accessing and receiving care
  - ensuring education and training programs integrate content focused on chronic pain management and support, including how to adapt to the needs of injured workers, which could build on existing efforts already underway across Canada, such as: the Toronto Interfaculty Pain Curriculum; the Royal College of Physicians and Surgeons of Canada's training standards in the field of pain medicine; updates to physiotherapy curriculum to improve the integration of content related to pain; the curriculum being collectively developed by the Association of Faculties of Medicine Canada's 17 medical schools for the diagnosis, prevention, and treatment of pain; and the Canadian Association of Schools of Nursing, Association of Faculties of Pharmacy of Canada, and Canadian Association for Social Work Education's creation of a three-year interprofessional education program on pain
  - providing them with professional development and clinical support opportunities to stay up to date with the latest developments
  - creating interprofessional platforms and communities of practice that enable those providing supports to injured works with chronic pain to learn from each other
- **taking an equity-centred approach to all of the above by identifying priority sub-populations and adapting as needed**.

We identified 31 evidence syntheses that addressed element 2 and its sub-elements (see Appendix 4). These syntheses provide insights related to:

- the knowledge domains required for developing integrated approaches aimed at improving work transitions for individuals with chronic pain who seek paid or unpaid work (16) and factors related to navigating the complexity of returning to work for individuals with chronic health conditions (49; 50)
- the promise of developing dynamic work plans and providing biopsychosocial supports,(16) self-management strategies (e.g., yoga), and workplace interventions (e.g., goal setting, education, and communication, with pain education and task modification),(51; 52) as well as coordinated, tailored, and interdisciplinary support services and programs that can all lead to positive health and well-being outcomes among injured workers (49; 53-57)

- factors that impact return to work and that could be considered by employers to improve outcomes (58; 59), as well as key aspects of supportive work environments that can improve return-to-work outcomes (59-65)
- key strategies to improve professional education, knowledge, and skills related to chronic pain (66; 67), including specific modalities in the context of graduate medical education (68), how organizations can support improved chronic pain management (69), how specific treatments can be optimized (e.g., prescription drugs monitoring programs),(70) and the importance of employing a biopsychosocial model to overcome cultural differences in chronic pain patients from refugee or immigrant backgrounds.(71)

Adjust health- and social-system arrangements

This element focuses on adjusting health- and social-system delivery, financial and governance arrangements to facilitate improvements in how injured workers access and receive support for chronic pain within and across jurisdictions in Canada. It could include the following sub-elements:

- **coordinating the delivery of supports for injured workers across settings, sectors, and systems**; for example:
  - strengthening the linkages between the services and supports covered by the workers' compensation system, the health- and social-system, and the private insurance/employee benefits system, including enhanced communication among healthcare and social-care professionals, employers, employees, and insurers
  - creating opportunities for employers and unions to collectively advance workplace efforts related to chronic pain prevention, assessment, treatment, and management – like those for mental health and other chronic conditions (including agreement about flexible work options to enable people with pain to remain in the workforce, given the intermittent nature of pain, and removing policies that incentivize return to work over employee well-being)
  - creating mechanisms to help injured workers with chronic pain navigate and transition smoothly from the supports covered by WCBs to those covered by PT health and social systems and/or private employer-based insurers
- **updating what (and how much) is covered to reflect best practices in chronic pain support for injured workers**; for example:
  - updating workers' compensation policies by aligning eligibility criteria – and return-to-work assessments – with best practices in chronic pain management, including widely accepted definitions of chronic pain
  - updating the list of what publicly-funded health- and social-system supports are offered to injured workers who are denied benefits, no longer have access to them, or require long-term complements to what WCBs offer them
- **facilitating the ongoing alignment of chronic pain supports for injured workers across Canada**; for example:
  - designating an organization/body to support the setting of standards for chronic pain policies and programs for injured workers, as well as the ongoing monitoring of whether and how they're adopted and implemented across PTs (which would need to include representation from key players such as the Association of Workers' Compensation Boards of Canada, organizations representing workers including unions, and employers)
  - adjusting existing policies and programs to better reflect the needs of injured workers who have (or may develop) chronic pain (e.g., updating employment standards to require fully paid sick leave for all workers to enable those with pain to remain in the workforce, and to prevent individuals with acute pain from experiencing further injury and chronic pain).

We identified 23 evidence syntheses related to element 3 and its first sub-element (see Appendix 5). These syntheses provided insights about coordinating the delivery of supports, including:

- key factors that support successful collaboration across diverse care partners (e.g., collaborative culture and structure) (72-86) and cross-sector programs (e.g., clear goals, explicit roles, strong leadership) (72-78; 85; 86)
- the importance of monitoring, evaluation, and continuous feedback in collaborative arrangements (76; 77; 81; 82; 84), and of considering how cross-sector programs are resourced (e.g., ensuring equitable allocation across partners and sectors, joint funding and budgeting for programs, pooling and sharing of resources) (37; 73; 74; 82; 87-89)
- key issues related to scale (e.g., local versus regional) and sustainability (37; 82), including highlighting factors – such as government partnerships, collaboration across ministries and other branches of government, and consistent funding – that can affect sustainability.(38; 74; 75; 90; 91; 92)

Nine syntheses addressing decisions related to determining what and how much is covered provided the following insights:

- access to public and private health insurance is associated with increased health service use (including allied health services) and improved health outcomes, and increasing coverage for lower-income and uninsured individuals can improve their access to quality care, with little evidence to suggest negative implications associated with this type of expansion, such as longer wait times (93-95)
- health inequities exist between publicly and privately insured individuals: privately insured individuals have better access to care and better health outcomes (96; 97)
- the coexistence of public and private insurance in healthcare can lead to logistical and financial issues, as well as inequity in access (97; 98), and private insurance has negative impacts on public healthcare systems and introduces inequality, especially for lower-income individuals (96)
- private financing increases individual and system costs for care.(97; 99-101)

Finally, one evidence synthesis found that the establishment of approaches to facilitate ongoing monitoring and evaluation of support systems (which related to the last sub-element) can be influenced by political involvement, system design, stakeholder involvement, and public involvement.(102)

Implementation considerations

Below we identify some barriers that may make it difficult to proceed with the elements, as well as facilitators that could create a window of opportunity for advancing them.

References – see appendices

Moat KA, Grewal E, Dass R, Whitelaw H. Evidence brief: Enhancing policies and programs to support injured workers with chronic pain in Canada. Hamilton: McMaster Health Forum. 4 & 5 December 2024.

We are grateful to Steering Committee members and merit reviewers (Martine Bordeleau, Renée Roussel, and Megan Scott) for providing feedback on previous drafts of the brief. The evidence brief and the stakeholder dialogue it was prepared to inform were funded by the Ontario SPOR SUPPORT Unit, which is supported by the Canadian Institutes of Health Research, the Province of Ontario, and partner Ontario hospital foundations and institutes. The McMaster Health Forum receives both financial and in-kind support from McMaster University. This synthesis was prepared in collaboration with Pain Canada, which receives financial support from Health Canada. The views expressed herein are the views of the authors and should not be taken to represent the views of the Ontario SPOR SUPPORT Unit, McMaster University, or Health Canada.

ISSN 1925-2250 (online)