McMaster University | HEALTH FORUM

Rapid Synthesis

Examining the features and impacts of workers' compensation policies for chronic pain on health, social, and economic outcomes

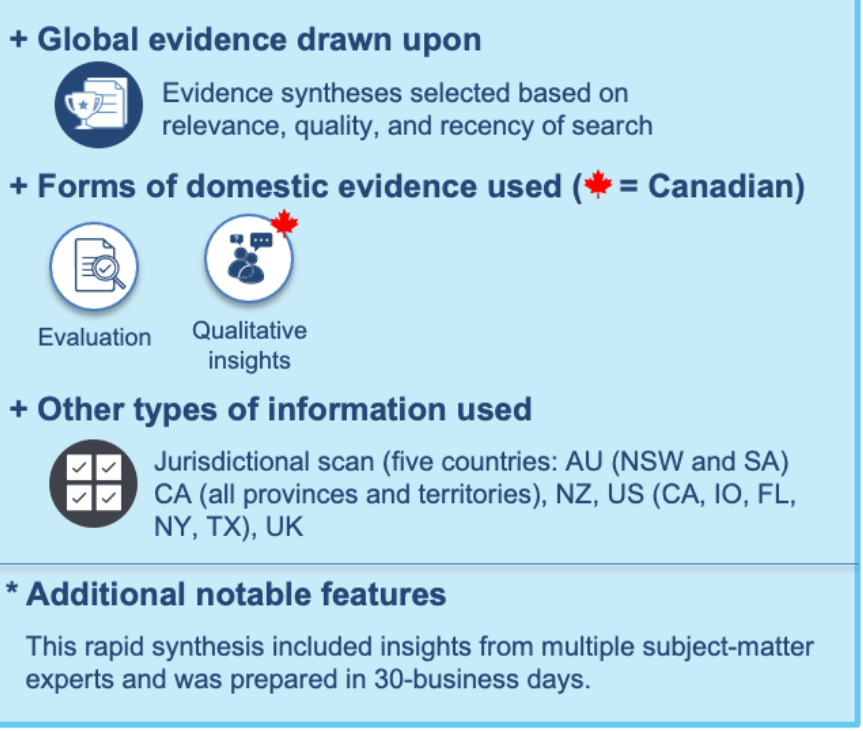
29 January 2024

[MHF product code: RS 116]

Context

- In Canada, an estimated 7.6 million, or one in five people, live with chronic pain and it is estimated that this will increase by 17.5% by 2030 due to population growth and aging.
- The Canadian Chronic Pain Task Force identified that chronic pain has a significant impact on the economy with the direct and indirect costs of chronic pain estimated in 2019 to between $38.2 and $40.3 billion.(1)
- Compensation claims for chronic pain are high and rising at workers' compensation boards across Canada, in part because of the growing recognition of the legitimacy of chronic pain.
- The policy language being used by workers' compensation boards has not always kept pace with evolving evidence about chronic pain: it varies across provinces and territories, and further adjustments to language are not always consistent across all policies or proposed policy changes.
- The compensation rate for chronic pain, as set by workers' compensation boards, 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) and the rate varies across provinces and territories.
- Understanding the features and impacts of workers' compensation policies for chronic pain is a first step in ensuring they are aligned with the best-available evidence and can support the health and well-being of injured workers.

Box 1: Evidence and other types of information



Questions

- What are the features of workers' compensation board policies for chronic pain and the impacts of these policies on health, social, and economic outcomes, and how do these impacts vary by groups and contexts?
- What are the similarities and difference in the policy language and compensation-design features for chronic pain used by workers' compensation boards in Canadian provinces and territories, and in the workers' compensation of Australia, New Zealand, the U.K., and the U.S.?

High-level summary of key findings

- Almost all the findings related to the features of workers' compensation policies came from the jurisdictional scan, which found that although all jurisdictions provided a combination of wage-loss benefits and medical/rehabilitation benefits, only some had specific chronic pain compensation policies in place, with only the province of British Columbia developing a worker-centred determination model for chronic pain.
- There is little recent research evidence that documents the impacts of compensation board policies for chronic pain and what does exist points to mixed findings – on one hand the evidence points to workers' compensation boards expanding claimants' access to treatment and rehabilitation services, while on the other, claimants report having to navigate negative experiences with the workers' compensation boards resulting in considerable distress.
- Given the state of the evidence base and our evolving understanding of chronic pain and approaches to treat it, next steps for this work could include convening stakeholders for a facilitated discussion that combines findings from this rapid synthesis, other literature related to chronic pain, and the expertise and experiences of those working in this area.

Research evidence

- We identified 19 evidence documents relevant to the question, of which we deemed 12 to be highly relevant, six of medium relevance, and one of low relevance.
- We found relatively few recent evidence documents that explicitly addressed the effects of workers' compensation policies on the health, social, and economic outcomes of individuals with chronic pain, and those that did tended to focus on health outcomes, and to a lesser extent economic outcomes.

Box 2: Approach and supporting materials

At the beginning of this rapid synthesis, we engaged a group of subject matter experts, who helped us to scope the question and ensure relevant context is taken into account in the summary of the evidence.

We identified evidence addressing the question by searching Health System Evidence, Social Systems Evidence, and PubMed to identify evidence syntheses, protocols for evidence syntheses, and primary studies. All searches were conducted on 4 January 2024. The search strategies used are included in Appendix 1. We identified jurisdictional experiences by hand searching government and stakeholder websites for information relevant to the question from five countries including all Canadian provinces and territories, national policies in both New Zealand and the United Kingdom and sub-national policies in two Australian states (New South Wales and South Australia) and five U.S. states (California, Florida, Iowa, New York, and Texas).

In contrast to our rapid evidence profiles, which provides an overview and insights from relevant documents, this rapid synthesis provides an in-depth understanding of the evidence.

We appraised the methodological quality of evidence syntheses that were deemed to be highly relevant using AMSTAR. Note that quality appraisal scores for evidence syntheses such as rapid syntheses/reviews are often lower because of the methodological shortcuts that need to be taken to accommodate compressed timeframes. AMSTAR rates overall quality on a scale of 0 to 11, where 11/11 represents an evidence synthesis of the highest quality. It is important to note that the AMSTAR tool was developed to assess evidence syntheses focused on clinical interventions, so not all criteria apply to evidence syntheses pertaining to delivery, financial or governance arrangements within health systems or to broader social systems.

This rapid synthesis was prepared in a 30-business day timeline.

A separate appendix document includes:

1) methodological details (Appendix 1)
2) a framework to organize what we looked for (Appendix 2)
3) a summary table comparing features of workers' compensation board policies in each jurisdiction (Appendix 3)
4) findings from included evidence syntheses, organized by relevance to the questions (Appendix 4)
5) findings from included single studies, organized by relevance to the questions (Appendix 5)
6) detailed findings related to features of workers' compensation board policies in other countries and in Canadian provinces and territories (Appendix 6)
7) documents excluded at the final stages of reviewing (Appendix 7)

- Only two evidence documents, one recent low-quality evidence synthesis and one recent single study, explicitly compared the features of workers' compensation policies, and found that workers' compensation policies had varied effects on health and economic outcomes, with some reporting that involvement with the workers' compensation system, particularly adversarial claims processes and experiences with poor communication, led to mental distress.

Jurisdictional scan

- We looked at workers' compensation policies for all Canadian provinces and territories, national policies in both New Zealand and the United Kingdom and sub-national policies in two Australian states (New South Wales and South Australia) and five U.S. states (California, Florida, Iowa, New York, and Texas).
- In all jurisdictions, a combination of wage-loss benefits (compensation) and medical/rehabilitation benefits are offered for temporary and permanent disability to full-time workers.
- Specific chronic pain policies were only identified in five Canadian provinces (British Columbia, Alberta, Ontario, New Brunswick, and Nova Scotia) and three territories (Northwest Territories, Yukon, Nunavut).
- British Columbia was the only province in the process of transitioning towards a worker-centred determination model, while the remaining provinces based their compensation on a standardized-guideline determination after which typical recovery would be expected, which is commonly identified as being six months.
- Specific compensation guidelines for chronic pain were identified in both Ontario and New Brunswick, while other provinces such as Nova Scotia and Prince Edward Island use impairment ratings expressed as a percentage of total body impairment, with similar approaches used in New Zealand and U.S. states to determine compensation amounts.
- All jurisdictions have stepped mechanisms to appeal decisions with most culminating in a decision by an independent body or tribunal; the exception is the U.S., where final appeal decisions are brought through the state judicial system.

Framework to organize what we looked for

- Chronic pain as conceptualized in International Classification of Diseases (ICD-11)
  - Chronic primary pain
  - Chronic secondary pain
    - Chronic cancer-related pain
    - Chronic post-surgical or post-traumatic pain
    - Chronic secondary musculoskeletal pain
    - Chronic secondary visceral pain
    - Chronic neuropathic pain
    - Chronic secondary headache or orofacial pain
- Chronic pain conceptualized using another framework
  - Classification of functional impairment
    - Impairment
    - Permanent partial disability
    - Permanent total disability
  - Sector of work
    - Business, finance, and administration occupations
    - Natural and applied sciences and related occupations
    - Health occupations
    - Occupations in education, law, and social, community, and government services
    - Occupations in art, culture, recreation, and sport
    - Sale and service occupations
    - Trades, transport, and equipment operators and related occupations

        - Natural resources, agriculture, and related production occupations
        - Occupations in manufacturing and utilities
    - Type of worker
        - Full-time
        - Part-time
        - Occasional/casual
        - Temporary foreign worker
    - Nature of eligibility
        - Worker-centred determination
        - Standardized guideline determination (e.g., after which typical recovery would be expected)
    - Compensation for wages lost
        - Fixed percentage
        - Variable percentage (e.g., tied to functional impairment)
    - Treatment and rehabilitation
        - Assessment
            - By treating physician
            - By allied health professional (e.g., occupational therapist)
            - By multidisciplinary/interdisciplinary team
        - Programs, services, and products covered
            - Non-pharmacologic therapy (e.g., physical treatments and psychological therapies)
            - Over-the-counter pharmacologic therapies
            - Prescription non-opioid pharmacologic therapies
            - Medical cannabis authorized by a healthcare provider
            - Non-opioid pharmacologic therapies (e.g., NSAIDs, SNRIs)
            - Prescription opiate therapies
            - Post-discharge supports
            - Multidisciplinary/interdisciplinary treatment (including any of the above)
        - Return-to-work assistance (or vocational rehabilitation) covered
            - Medical management
            - Physical conditioning
            - Workplace conditioning (e.g., requirements for ergonomic assessment or cognitive demand assessment)
            - Pain and symptom management
    - Governance arrangements related to contested decisions
        - What decisions need to be made
            - Reassessment of functional capacity
            - Determination of change in compensation and/or benefit
        - By whom can decisions be made
            - Internal to workers' compensation board
            - Independent process (e.g., tribunal; justice system)
- Priority populations
    - Individuals experiencing job insecurity
    - Individuals without a primary care provider
    - Individual living in northern, rural, or remote areas
    - Recent immigrants or refugees
- Impacts of workers' compensation policies
    - Health impacts
        - Physical health
        - Mental health

- Social impacts
- Economic impacts
  - Income and wages

What we found

We identified 19 evidence documents relevant to the question, of which we deemed 12 to be highly relevant, six of medium relevance, and one of low relevance. The highly relevant evidence documents include:

- three evidence syntheses
- nine single studies.

We outline in narrative form below our key findings related to the question from highly relevant evidence documents and based on experiences from the jurisdictional scan of five countries including all Canadian provinces and territories, national policies in both New Zealand and the United Kingdom, and sub-national policies in two Australian states (New South Wales and South Australia) and five U.S. states (California, Florida, Iowa, New York and Texas).

Detailed data extractions from each of the included evidence syntheses is provided in Appendix 4, while data extraction from each of the single studies is provided in Appendix 5. A summary of the experiences from other countries and from Canadian provinces and territories is provided in Appendix 3 and additional details by jurisdiction are provided in Appendix 6. Hyperlinks for documents excluded at the final stage of reviewing are in Appendix 7.

Coverage and gaps by existing evidence

We found relatively few recent evidence documents that explicitly addressed the effects of workers' compensation policies on the health, social, and economic outcomes of individuals with chronic pain. While there is a significant literature on the effects of treatment and rehabilitation interventions for chronic pain, many of these evidence documents do not explicitly address workers' compensation policies and were therefore excluded. Further, we did identify some studies that were highly relevant to the questions but were very old (e.g., pre-2000) and as a result were deemed to be of 'low or medium relevance' and are included in the appendix.

In general, the included evidence documents tended to focus on the health outcomes, and to a lesser extent economic outcomes, of workers' compensation policies. Most evidence documents related to full-time workers with permanent-partial disability.

With respect to other aspects of the framework, we did not identify any evidence documents related to specific sectors of work, nor did we identify any findings related to governance arrangements about contested decisions or priority populations.

Key findings from highly relevant evidence sources

Key findings related to the features of workers' compensation policies

Though not chronic pain specific, one recent low-quality evidence synthesis written by the American College of Occupational and Environmental Medicine provides a description of elements of workers' compensation systems in the United States, as well as a series of best practices based on the synthesis.(2) These include:

- allowing a choice of provider in the initial, early, and late phases of a worker's compensation
- ensuring minimum qualifications and training of providers delivering workers' compensation care (including those undertaking assessments)

- assessing medical causation with a specific focus on mechanism of injury, applicable legal standards, and evidence-based reasoning
- maintaining a thorough understanding of an individual's job duties
- using functionally oriented medical treatment guidelines
- limiting the use of prior authorizations
- using ongoing functional assessment for patients to set treatment goals and assist in early return to work
- implementing administrative reforms that states can put in place to alleviate compartmentalization in workers' compensation
- using electronic health record platforms that include functional assessment and other components relevant to workers' compensation such as treatment progress and whether vocational modifications are being made.(2)

One older single study examined cross-country differences in workers' compensation for chronic occupational low back pain. The study found that the six included countries tended to take either a compensation approach or an approach focused on reintegration. The compensation approach – such as in the U.S. – is described as being focused on strict medical and occupation requirements to be eligible for long-term disability benefits and/or work interventions, while a focus on reintegration – such as that used in the Netherlands – has few medical or occupation requirements for entitlement and focuses instead on return-to-work and vocational interventions.(3)

Key findings related to the impact of workers' compensation policies

The included evidence noted that workers' compensation policies had varied effects on health, social, and economic outcomes.

With respect to health outcomes, while one older low-quality evidence synthesis found a positive association between workers' compensation and return-to-work outcomes among those with chronic low back pain,(4) other evidence syntheses found elements of compensation policies created significant distress for workers.(5-7) In particular, one recent medium-quality evidence synthesis described delays in communication and approval of treatment contributed to the negative experience and health of injured workers in Australia.(5) Several studies in the evidence synthesis suggested negative mental health outcomes as a consequence of involvement in workers' compensation systems, namely as a result of facing an adversarial claims processes, limited communication, independent medical evaluations and a lack of understanding of system requirements.(5) Two additional single studies identified similar results. One recent single study of claimants following a musculoskeletal injury found that perceived injustice during interactions with claim agents was associated with an increase in mental distress, highlighting the importance of fair, open, and respectful communication.(6) A second recent single study found the claims process of the Workplace Safety Insurance Board (WSIB) incrementally worsened some physical, social, and financial outcomes of claimants.(7) Participants in the study reported considerable levels of stress and were found to be at greater risk of developing persistent mental health problems as compared to those who were not injured at work. In particular, these outcomes stemmed from power differentials between claimants and WSIB workers, feelings of frustration and helplessness throughout the claims processes, and negative ramifications of these processes and experiences on career plans. One very old single study examining cross-country differences in compensation approaches for chronic pain found less strict compensation policies for entitlements to long-term and partial disability benefits were associated with sustainable return-to-work outcomes.(3)

Evidence documents, including one older low-quality evidence synthesis, identified that workers' compensation mediates access and can influence individuals' medical and rehabilitation treatments. One older single study found an increase in benefit generosity for workers' compensation was positively associated with an increase in claims and disability duration, driven primarily by musculoskeletal conditions (namely back and neck pain).(8) Two single studies identified the effects of workers' compensation benefits on opioid use. One of these studies reported that individuals with chronic pain receiving workers' compensation had a higher likelihood of receiving high doses of opioids as compared to non-benefit collecting individuals.(9) However, the second single study found the

implementation of an opioid management policy within the Workers Compensation Board led to a significant reduction in prescription opioids among claimants as compared to the general population with chronic pain.(10) Despite the inclusion of mental health services in the medical benefit, one recent single study from Australia found that less than 10% of workers with chronic low back pain accessed mental health services as part of their compensation.(11) The study found that women, those living in urban areas, and those with longer-term compensation were more likely to access mental health care.(11)

Two single studies examined the provision of vocational rehabilitation as part of workers' compensation return-to-work programs for individuals with chronic pain. One recent single study compared a comprehensive and less comprehensive vocational rehabilitation program and found both improved work participation for those with chronic musculoskeletal pain.(12) The study found that the less comprehensive program may be useful for patients with work participation as their treatment goal, those who are willing to return to work and those who have already made steps towards reintegration, whereas a comprehensive program may be more beneficial when there is a contentious relationship with the employer or the individual is more than one year out of work.(12) The second single study found integrating opportunities to understand worker's worries about the return-to-work process and job demands facilitates sustainable return-to-work outcomes.(13)

Key findings from jurisdictional scans

For the jurisdictional scan, we looked at workers' compensation policies for all Canadian provinces and territories, national policies in both New Zealand and the United Kingdom, and sub-national policies in two Australian states (New South Wales and South Australia) and five U.S. states (California, Florida, Iowa, New York, and Texas). Sub-national jurisdictions were chosen based on a combination of geographic and population diversity as well as the presence of select industries (e.g., manufacturing and agriculture). A brief summary of policies is provided below. In addition, a summary table is available in Appendix 3 and additional details by jurisdiction in Appendix 6.

In all jurisdictions a combination of wage-loss benefits (compensation) and medical/rehabilitation benefits are offered for temporary and permanent disability to full-time workers. Specific chronic pain policies were only identified in five Canadian provinces (British Columbia, Alberta, Ontario, New Brunswick, and Nova Scotia) and three territories (Northwest Territories, Yukon, and Nunavut). In general, compensation for wages lost for temporary disability are based on a fixed percentage ranging from 66% to 100% of loss earnings. In some jurisdictions, a variable percentage tied to functional impairment is provided for permanent disabilities and may be capped at between 3% and 6% for pain specific claims, such as in Nova Scotia. Benefit assessment is most frequently provided by a physician, but occasionally requires additional approval such as a claims officer or independent evaluator.

In Canadian provinces and territories, British Columbia was the only identified jurisdiction that has recently proposed to use a worker-centred determination model by removing mentions of usual recovery times. The remaining provinces base their compensation on a standardized-guideline determination after which typical recovery would be expected, which is commonly identified as being six months.

In B.C., efforts are underway to update WorkSafeBC's policy on compensation for chronic pain. Currently a disability rating and loss of earning assessment is conducted using a comparison of pre- and post-injury earnings as well as a degree of injuries. However, proposed amendments to the policy include:

- updating the definition of pain, chronic pain, and the stages of pain based on medical literature to align with the International Association for the Study of Pain by:
  - defining acute pain as pain that persists or fluctuates in intensity for three months or less
  - defining chronic pain as pain that persists or fluctuates in intensity for more than three months
  - removing reference to usual recovery times from the definition of chronic pain, as well as removing the reference to the sub-acute stage of pain

- emphasizing treatment and rehabilitation to prevent the development of chronic pain and permanent chronic pain by:
  - offering early intervention where it will assist in preventing both the development of chronic pain and the stabilization of chronic pain as a permanent condition
  - offering early intervention where it assists the worker's recovery and safe and timely return to work
- updating guidance on how to assess entitlement to permanent partial disability benefits for chronic pain to:
  - retain the terms 'specific chronic pain' and 'non-specific chronic pain' but update the definitions to clarify that the distinction between these terms is adjudicative (not medical) and is used to indicate whether the injury or disease from which chronic pain developed as a compensable consequence has stabilized into a permanent condition
  - update the policy to indicate that entitlement will be considered when the specific chronic pain is inconsistent with the associated permanent condition
  - clarify that specific chronic pain consistent with the worker's associated permanent condition will not be considered for entitlement to permanent partial-disability benefits
  - remove the disproportionate test from the consideration of permanent partial disability entitlement for non-specific chronic pain
  - state that where a worker experiences non-specific chronic pain, permanent disability benefits will be assessed.

The current proposed changes in British Columbia do not include changes to impairment ratings for permanent chronic pain, but alternative rating schemes, expert reviews and opinions, medical impairment guides, and approaches being used in other jurisdictions are currently being considered.

In Alberta, Ontario, and New Brunswick, the Workers' Compensation Board of Alberta, Ontario Workplace Safety and Insurance Board (WSIB), and WorkSafeNB cover pain treatment if pain is a result of injury, persists past usual healing time, and impairs earning capacity. Pain is compensable if all rehabilitation treatment has ended and the pain continues to disrupt one's life and persists past six months. In Ontario and New Brunswick, guidelines have been developed for entitlements resulting from chronic pain. These policies include information on when pain can be considered chronic as well as necessary conditions and evidence necessary to manage the claim.

In Nova Scotia, impairment ratings are expressed as a percentage of total body impairment with 100% percent being the maximum possible, and 6% being the maximum possible rating any one person can receive for chronic pain. Workers found to have a pain-related impairment will be compensated with a permanent benefit so long as medical evidence establishes that the worker's pain is connected to an original compensable injury.

All three territories have policies specific to chronic pain. In the Northwest Territories and Nunavut, pain is considered a manageable condition and Workers' Safety and Compensation Commission may cover pain management services (including medical management, vocational conditioning, and stress management), as well as provide compensation if the pain is connected to a workplace injury, persists past an expected healing time (six months), is inconsistent with physical findings, disrupts life, and is confirmed by medical opinions. If unable to work and eligible, a worker with chronic pain may receive a pension plan. In the Yukon, temporary wage loss benefits are equal to 75% of the workers' loss of earning capacity (with 100% available for low average earnings). Individuals with permanent impairment may receive additional benefits separate from compensation of loss of earnings based on an assessment by a medical professional when the individual is said to have achieved "maximum medical improvement."

Findings from other provinces were not specific to chronic pain but rather to long-term disability. In Saskatchewan, if symptoms from an injury persist and individuals are categorized as needing level three care (e.g., where there are risk factors for chronic disability, no return-to-work date, and the expected recovery date has passed), the board organizes an assessment from an interdisciplinary team to provide a treatment plan and the individual may be entitled to continued benefits (up to a maximum of $96,945 per year). In Manitoba, long-term permanent impairment paid by lump sum payments is available if the permanent impairment is the result of a workplace injury.

Additional services including medical treatment, return-to-work assistance, and vocational rehabilitation (including finding alternative work) are all available. In Quebec, the Commission des norms, de l'équité, de la santé et de la sécurité du travail (CNESST) is responsible for determining whether the worker is able to do their job, return to work, and stop income replacement. The CNESST pays an income replacement indemnity to workers who are unable to work due to an employment injury and are paid until they are able to do their job, an equivalent job, or a suitable job full-time. The income replacement indemnity is equal to 90% of the worker's net income and is paid every two weeks. In Prince Edward Island, people with a permanent reduction in function may receive an impairment award based on a percentage of total body impairment, but it is unclear whether chronic pain is included in this scheme. Long-term wage benefits are offered to people whose condition is stable, who are unable to find suitable work, and who continue to experience a loss of earnings. These benefits are reviewed after 36 months.

With respect to the adjudication process, timing was frequently dependent on the complexity of the case, with simple cases taking days while more complex cases could take many weeks. Many provinces and territories – Alberta, Manitoba, Ontario, New Brunswick, Nova Scotia, Newfoundland and Labrador, Northwest Territories and Nunavut, and the Yukon – did not provide information on whether individuals can seek treatment prior to receiving the adjudication decision and whether this could be reimbursed. However, select provinces including British Columbia, Saskatchewan, and Quebec, all recommend seeking treatment in the interim and note that workers may be reimbursed for treatment during that time. Prince Edward Island uses a hybrid approach, whereby the worker is entitled to benefits after the claim has been accepted but permits select treatments including physiotherapy and chiropractic services before a final decision has been made.

Outside of Canada, we did not identify specific policies related to chronic pain in either of the two Australian states. In New South Wales, workplace capacity assessments are performed by injury management consultants and medical professionals with weekly compensation based on pre-injury earnings. Time allotted for compensation varies based on the case and individual's unique factors. A rapid synthesis on pain management and compensation schemes in New South Wales reported that 20% of people who file a workers' compensation claim have chronic pain; however, there is little information about the associated supports available to these individuals. In South Australia, assessments are conducted by medical professionals, a return-to-work coordinator, and a claims specialist. Workers are eligible to receive 100% of their weekly earnings for the first 52 weeks after injury and 80% for the following 52 weeks. The model of care for chronic pain management in South Australia recommends that work specialists and return-work work treatments occur as a part of multidisciplinary pain care. In both states, reimbursements are provided for treatments that occur during the period in which claims are being reviewed.

In New Zealand, the Accident Compensation Corporation does not have specific guidelines for chronic pain. Individuals may be offered up to 80% of their weekly compensation and partial coverage for treatment of their injuries. Individuals with a permanent condition may be entitled to additional compensation. Persons must complete a whole-person assessment conducted by external assessors using American Medical Association guidelines. The maximum amount of each payment is based on percentage of impairment ranging from 10% impairment at $4,162.20 NZD to 80% at $166,487.44 NZD. The adjudication process takes approximately 35 working days and it is unclear whether individuals can access treatment and are entitled to reimbursement of treatment in the interim.

The U.K. does not have a government workers' compensation program and instead mandates that employers get employer's liability insurance to cover any injuries. The amount and duration of compensation for wage loss and any benefits varies per insurance package. People with chronic pain may seek additional government funding through job seeker's or employment support allowance. Job seeker's allowance depends on income capital, number of dependants, and age. Persons with chronic pain may use this when finding suitable employment for their condition. Employment and Support Allowance can be given to people who have limited capability for work. The amount depends on medical examinations and income capacity. In Scotland, people with chronic pain may apply for the Scotland Adult Disability Payment for a standard weekly amount of £68.10 or an enhanced amount of £101.75.

In the U.S., workers' compensation differs by state. We did not identify any policies specific to chronic pain in any of the five states that we assessed. In California, workers' compensation insurance provides benefits for medical care, temporary wage loss, permanent disability benefits if function is never restored, or supplemental job displacement benefits for those who need retraining to find other employment. Within one day of filing a claim form, the worker is authorised appropriate medical treatment of up to $10,000 USD. Treatments are covered as long as they are determined to be medically necessary by a physician (selected by an employer or an employers' medical network) who is able to show evidence of treatment efficacy. Standard temporary wage-loss benefits include two-thirds of gross wages pre-tax to a maximum of 104 weeks. Permanent disability is assessed by a medical doctor after an individual has demonstrated stabilization. A disability percentage is calculated based on how the impairment affects ability to work, occupation, and future earning capacity. A maximum rating of 3% is permitted for pain resulting from injury, but if not able to work this may increase to 15%. Similar temporary disability benefits are available in Florida, including wage-loss benefits and medical treatments authorized by a doctor and insurance coverage. Determination of a claim in Florida takes typically two to six weeks and workers are not eligible for paid benefits during the waiting period. Individuals who do not fully recover from their workplace injury may be qualified for Permanent Total Disability. In Iowa, individuals are entitled to medical care, travel expenses, and wage loss benefits. Wage loss benefits are calculated based on 80% of spendable weekly earnings. However, select professions including volunteer firefighters, emergency medical care providers, reserve peace offers, and volunteer ambulance drivers are paid equally to their pre-injury earnings. It is unclear whether individuals are able to seek treatment and become eligible for reimbursement prior to receiving a decision on their adjudication. Like other states, permanent partial or total disability benefits in Iowa may be offered to individuals based on a physician assessment using guidelines from the American Medical Association. In New York, medical and loss wage benefits are provided so long as a medical report is completed within 90 days by an independent medical examiner. In most cases, medical care for an injury is a lifetime benefit. The Workers Compensation Board in New York has medical treatment guidelines for complex regional pain syndrome to inform decision making, but procedures for compensation decision-making for pain are not specified. Lost-wage benefits are available and based on the degree of disability. Workers are entitled to benefit payments if lost time exceeds seven days. Individuals with long-term conditions, such as chronic pain, may apply for disability benefits. These are cash-only and equal to 50% of average weekly wage for the last eight weeks worked, with a maximum of $170/week USD. In Texas, the employer or insurance pays for compensation, not the Department of Insurance, which is responsible for regulating benefits and resolving disputes. Regulated income benefits are based on average weekly wages. Impairment-income benefits are based on an impairment rating that begins at 10% and increases by increments of 10%. Supplemental income benefits may be paid to those with ratings of 15% or more for those that have not returned to work, are seeking employment, and did not accept a lump sum payment for their injury. Lifetime income benefits are available for those with a permanent disability (though it is unclear whether chronic pain qualifies). These benefits are 75% of average weekly wage with a 3% increase each year. Medical benefits for treatment are available through an employer-approved healthcare network. The timeline for adjudication in Texas is not stated and it is unclear whether individuals are able to seek treatment and whether they are eligible for reimbursement while awaiting a decision. In all states, individuals with chronic pain remaining from their injuries may apply for federal compensation programs including the State Disability Insurance, unemployment insurance, or Social Security Disability Insurance.

Next steps

Given there is little empirical literature on the features and impacts of workers' compensation board policies and few updates to the policy approaches being used, this area may benefit from convening those working on workers' compensation policies, professionals responsible for the adjudication of chronic pain, and individuals with lived experiences for a facilitated deliberation of next steps. There have been considerable advances in the collective understanding of chronic pain and how best to treat it. Workers' compensation boards may benefit from an opportunity to discuss how this new understanding could best be integrated into existing approaches and the consequences and costs of doing so.

References

1. Campbell F, Hudspith M, Choiniere M, et al. An action plan for pain in Canada. Ottawa: Government of Canada; 2021.
2. Taylor TK, Mueller KL, Blink RC, McKinney DW, Silverman W, Das R. Workers' compensation elements in different jurisdictions in the United States. *Journal of Occupational and Environmental Medicine* 2020; 62(12): e760-e769.
3. Anema JR, Schellart AJ, Cassidy JD, Loisel P, Veerman TJ, van der Beek AJ. Can cross country differences in return-to-work after chronic occupational back pain be explained? An exploratory analysis on disability policies in a six country cohort study. *Journal of Occupational Rehabilitation* 2009; 19(4): 419-26.
4. Steenstra IA, Munhall C, Irvin E, et al. Systematic review of prognostic factors for return to work in workers with sub acute and chronic low back pain. *Journal of Occupational Rehabilitation* 2017; 27(3): 369-381.
5. Dean AM, Matthewson M, Buultjens M, Murphy G. Scoping review of claimants' experiences within Australian workers' compensation systems. *Australian Health Review* 2019; 43(4): 457-465.
6. Orchard C, Carnide N, Smith P. How does perceived fairness in the workers' compensation claims process affect mental health following a workplace injury? *Journal of Occupational Rehabilitation* 2020; 30(1): 40-48.
7. Noël C, Scharf D, Hawkins J, Lund J, Kozik J, Péfoyo Koné A. Experiences, impacts and service needs of injured and ill workers in the WSIB process: Evidence from Thunder Bay and District (Ontario, Canada). *Health Promotion and Chronic Disease Prevention Canada* 2022; 42(7): 272-287.
8. Lane TJ, Gray SE, Sheehan L, Collie A. Increased benefit generosity and the impact on workers' compensation claiming behaviour: An interrupted time series study in Victoria, Australia *Journal of Occupational and Environmental Medicine* 2019; 61(3).
9. Gebauer S, Salas J, Scherrer JF, Burge S, Schneider FD. Disability benefits and change in prescription opioid dose. *Population Health Management* 2019; 22(6): 503-510.
10. Kraut A, Shafer LA. Determining the influence of the Workers Compensation Board of Manitoba's opioid policy on prescription opioid use amongst WCB recipients. *American Journal of Industrial Medicine* 2021; 64(3): 170-177.
11. Gray SE, Di Donato M, Sheehan LR, Iles R, Collie A. The prevalence of mental health service use in Australian workers with accepted workers' compensation claims for low back pain: A retrospective cohort study. *Journal of Occupational Rehabilitation* 2023; 33(3): 602-609.
12. Beemster TT, van Velzen JM, van Bennekom CAM, Reneman MF, Frings-Dresen MHW. Usefulness and feasibility of comprehensive and less comprehensive vocational rehabilitation for patients with chronic musculoskeletal pain: Perspectives from patients, professionals, and managers. *Disabilty and Rehabilitation* 2022; 44(5): 754-767.
13. Coutu MF, Durand MJ, O'Hagan F, et al. Workers' worries, pain, psychosocial factors, and magin of manoneuvre, in relation to outcomes in a return-to-work program: An exploratory study. *Journal of Occupational Rehabilitation* 2023; Nov 23.

Waddell K, Dass R, Grewal E, Wilson MG. Rapid synthesis: Examining the features and impacts of workers' compensation policies for chronic pain on health, social, and economic outcomes. Hamilton: McMaster Health Forum, 29 January 2024.

The rapid-response program through which this synthesis was prepared is 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 2292-7999 (online)