

# INPLASY

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## What outcomes have been measured in people making workers' compensation claims? An evidence map of peer-reviewed observational research.

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## ADMINISTRATIVE INFORMATION

**Support** - Victorian Government.**Review Stage at time of this submission** - Formal screening of search results against eligibility criteria.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY2026100124**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 October 2026 and was last updated on 30 October 2026.

## INTRODUCTION

**Review question / Objective** This evidence map aims to systematically identify and categorise the outcomes reported in quantitative observational studies of workers with compensation claims in cause-based workers' compensation systems in English-speaking nations. The specific objectives are:

1. To identify the work, health and socioeconomic outcomes reported in published quantitative studies of workers with work-related injuries in cause-based workers' compensation systems.
2. To describe how outcomes are defined and measured (for example, self-reported, administrative data, clinical assessments, validated instruments).
3. To describe how the literature is distributed across outcome domains, injury types, jurisdictions, industry, populations, study designs and follow-up periods.

**Background** Work-related injuries and illnesses have a substantial global health burden, resulting in 2.9 million deaths and 395 million non-fatal injuries and illnesses in 2019 [1]. Cause-based workers' compensation systems, such as those operating in Australia, Canada and the United States, are statutory, employer-funded schemes that provide partial wage replacement during periods of incapacity, and fund medical treatment for people with work-related injury or illness. [2] [3]. Workers' compensation systems are designed to support recovery and prevent long-term work disability, helping injured and ill workers to remain engaged in employment. However, there is now a substantial body of evidence that for some workers, engagement in these systems may have adverse effects on their health, work and social participation.

Research in people with workers' compensation claims has provided important insights into recovery following workplace injury or illness. Evidence indicates that injured workers may experience a broad range of health, work, and

socioeconomic outcomes, including persistent physical and mental health symptoms, chronic health conditions, functional impairment and disability, difficulties returning to work, income loss, financial hardship, and substantial direct and indirect costs to workers and families [4-9]. Importantly, these outcomes may persist long after the initial injury, continuing beyond the finalisation of compensation claims [10].

Quantitative studies have examined this wide range of outcomes among workers with compensation claims. However, research has typically focused on individual outcomes in isolation, most commonly focusing on return to work and health outcomes. Studies vary considerably in data sources, outcome definitions, measurement approaches, populations, jurisdictions, injury types, and timing of outcome assessment. This variation has resulted in a fragmented evidence base, making it difficult to identify which outcomes have been most frequently examined, how they have been defined and measured and where important evidence gaps remain.

**Rationale** Evidence and evidence gap maps have been applied in occupational health to systematically characterise and synthesise existing research. However, these efforts have primarily focused on interventions and their effectiveness and have less often been applied to outcomes research. For example, Bondebjerg et al. mapped effectiveness studies of occupational health and safety regulatory interventions [11], and Shaw et al. mapped systematic reviews of multidisciplinary occupational health interventions aiming to improve work-related outcomes among employed adults [12]. To our knowledge, no evidence map has systematically described the outcomes reported following workplace injury. Mapping these outcomes is important because it can show which aspects of recovery are well studied and where the gaps remain, supporting more consistent outcome measurement and better-targeted future research and policy. This evidence map aims to systematically identify and categorise the outcomes reported in quantitative observational studies of workers with compensation claims in cause-based workers' compensation systems in English-speaking nations.

## METHODS

**Strategy of data synthesis** Three electronic databases (MEDLINE via Ovid, Embase via Ovid, PsycINFO via Ovid) will be searched for peer-reviewed articles published in English from 2006 onwards, covering the most recent 20-year period.

An expert librarian will be contacted to search relevant literature using an optimised search strategy. The search strategy will be developed using the Population, Concept, Context (PCC) framework [13]. The "Population" is workers with an accepted workers' compensation claim for a work-related injury or illness. Search terms will be built around this single concept and include "workers' compensation", "compensation board", and "compensation system". Terms for population's condition (injury or illness) and setting (workplace) will not be included because the compensation claim identifies a work-related condition. The "Context" is limited to countries with cause-based workers' compensation systems and includes Australia, Canada, the United States and New Zealand. The "Concept" is the outcomes measured among workers with accepted workers' compensation claims.

### Eligibility criteria Inclusion criteria

- Studies reporting at least one outcome among injured workers following a work-related injury or illness
- Study population in which 100% of participants had accepted workers' compensation claims
- Studies with samples from English-speaking nations with cause-based workers' compensation systems that provide statutory benefits - Australia, the US, and Canada
- Studies reporting individual worker/person level data or information
- Quantitative studies, including prospective cohort, retrospective cohort, cross-sectional, and ecological studies. Mixed methods will be included where the quantitative component uses one of these eligible study designs.

### Exclusion criteria

- Studies that do not report any outcomes among injured workers following a compensated work-related injury or illness.
- Studies with samples from countries other than Australia, the US, or Canada.
- Population not including workers with accepted workers' compensation claims
- No individual worker/person level data
- Qualitative studies, reports, briefs, conference proceedings, editorials, bulletins, systematic reviews, scoping reviews, clinical trials, and intervention studies.

**Source of evidence screening and selection** All identified records will be imported into Covidence, and duplicates will be removed before screening. We will conduct title and abstract screening using the predefined inclusion and exclusion criteria above. Two reviewers will independently screen an initial pilot sample of 200 (~10%) titles and

abstracts. Inter-reviewer agreement will be assessed using Cohen's Kappa, with a value of  $\geq 0.70$  considered strong agreement [14]. Any discrepancies will be discussed and resolved, and the eligibility criteria will be refined as necessary. Once adequate agreement is achieved, the remaining records will be screened by a single reviewer.

Two reviewers will independently screen the full texts of eligible studies against the above predefined criteria. Any disagreements will be resolved by consensus, or where necessary, by consultation with a third reviewer. Reasons for exclusion will be documented at the full-text screening stage.

**Data management** Data will be extracted using an agreed data extraction template. AI-assisted tools (e.g., Elicit) will be used to support the extraction of study characteristics and relevant data. Reviewers will review and verify all extracted data. Two reviewers will independently review an initial sample (~10%) of extracted studies to ensure consistency in data extraction and interpretation. Any discrepancies will be resolved through discussion. Following agreement, data from the remaining studies will be reviewed by a single reviewer. Following agreement, data from the remaining studies will be reviewed by a single reviewer. Extracted data will include author, publication year, country of study, study design, number of participants (sample size), participant characteristics, injury type, and reported outcomes. All outcomes reported in eligible studies will be extracted.

**Reporting results / Analysis of the evidence** A descriptive quantitative synthesis will be conducted to map the evidence. During data synthesis, reported outcomes will be grouped into broader thematic domains identified from the included studies. The number and frequency of studies reporting each outcome and outcome domain will be summarised descriptively to characterise the distribution of existing literature on outcome reporting, identify areas of research concentration, and highlight evidence gaps.

**Presentation of the results** Results will be presented using a PRISMA flow diagram of study selection and descriptive summary tables. Study characteristics, including population, injury type, jurisdiction, and follow-up period, will be reported. Outcomes will be grouped into broader outcome domains and summarised using frequencies and counts. Findings will be synthesised according to the review objectives (listed above), with a detailed presentation of reported outcomes, outcome

domains, and patterns in outcome reporting across studies. Evidence gaps and areas of research concentration will be highlighted.

**Language restriction** English.

**Country(ies) involved** Australia.

**Keywords** workers' compensation; injured workers; recovery; return to work; health services.

**Dissemination plans** The findings will be published in a peer-reviewed article and presented in various national and international conferences.

#### **Contributions of each author**

Author 1 - Preeti Maharjan - Author 1 contributed to the conceptualisation and design of the review, development of methodology and drafted the protocol manuscript.

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