Dear Madam/Sir,

The National Workplace Initiative is developing the Monitoring Framework as part of our core aim to lead a nationally consistent approach to mentally healthy workplaces. The Monitoring Framework will report on the state of mentally healthy workplaces in Australia and help guide collective action and strategic direction. The framework will establish the measures and metrics that all interested stakeholders can use to track long-term changes and trends in mentally healthy workplaces.

We see the Monitoring Framework as being particularly relevant to government and public agencies developing policy and supports, business and industry groups, unions, mental and workplace health organisations, and research institutions.

We are working with the University of Wollongong as an expert partner in the development of the Monitoring Framework. The University of Wollongong team would welcome your feedback on a discussion paper canvassing options for shortlisting potential datasets, indicators, measures and metrics for the Monitoring Framework. You can access the paper and provide feedback here.

This is the first opportunity to provide feedback on the draft Monitoring Framework, with further consultations to come.

Thank you,

National Workplace Initiative
National Mental Health Commission

Centre for Health Service Development
Australian Health Services Research Institute
University of Wollongong

Discussion Paper:

Desktop Review informing the National Workplace Initiative Monitoring Framework and Baseline State

29 September 2022

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Glossary of terms

Term	Definition
Baseline	A measure to assess scores on a variable prior to some intervention or change. It is the starting point before a variable or treatment may have had its influence (Cramer & Howitt 2004).
Benchmark	A standard, or point of reference, against which things can be compared, assessed, measured or judged (Organisation for Economic Co-opertation and Development 2007).
Data custodian	Data custodians are agencies responsible for managing the use, disclosure and protection of source data used in a statistical data integration project (Australian Government 2013).
Domain	From a data governance perspective, a data domain is "a logical grouping of items of interest to the organisation, or areas of interest within the organisation" (Firican n.d.).
Evaluation	The systematic assessment of the appropriateness, effectiveness, efficiency and/or sustainability of a program or its parts (NSW Health 2021).
Hazard	A situation or thing that has the potential to harm a person (Safe Work Australia n.d.-b).
Indicators	Indicators are used when something of interest can't be measured directly. It may be a construct, such as 'health', 'safety' or 'wellbeing', that does not have clearly defined properties to measure or count, or it could be something measurable but too difficult or costly to measure accurately. Indicators are proxy measures chosen to most closely align to the subject of interest (O'Neill et al. 2022, p. 14).
Instrument	For the purposes of this discussion paper, instrument is a catch-all term to describe a tool or measurement approach, which may be an indicator, measure or metric.
Lagging indicators	Measure outputs (when looking at processes) and outcomes (when looking at systems). They reflect what has happened in terms of whether goals and objectives are being met or problems that have already occurred (O'Neill et al. 2022, p. 19).
Leading indicators	Measure the inputs to processes and systems. They can help you to monitor resources used and to identify 'early warning signs' that allow for proactive action before a problem emerges, for example, staffing levels or climate scores (O'Neill et al. 2022, p. 19).
Measures	Capture information directly about the subject of interest. Measures are objective and two people measuring the same attributes should arrive at the same result (O'Neill et al. 2022, p. 14).
Mentally healthy workplace	The term mentally healthy workplace broadly describes workplace experiences that protect, respond to and promote mental health (National Mental Health Commission 2022).
Mental wellbeing	Often used interchangeably with the term mental health, this is 'a state of wellbeing in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community' (The World Health Organization 2018).
Metrics	Metrics are calculations derived from two (or more) measures, such as ratios and percentages. These can provide useful information about the size or change in one measure (or indicator) relative to another (O'Neill et al. 2022, p. 14).
Monitoring	Monitoring is the periodic measurement of indicators, (O'Neill et al. 2022, p. 18) for example, it can provide an indication of how an organisation is tracking at a particular point in time.
Psychological safety	Allows employees 'to feel safe at work in order to grow, learn, contribute, and perform effectively in a rapidly changing world' (Edmondson & Lei 2014).
Psychosocial hazard	Aspects of work that can lead to psychological or physical harm. These can stem from how work is designed and managed, the work environment and equipment, interactions with others or the types of tasks required (National Mental Health Commission 2022).
Psychosocial risk	Refers to aspects of work which have the potential to cause psychological or physical harm (Comcare 2022).
Risk	The possibility that harm (death, injury or illness) might occur when exposed to a hazard (Safe Work Australia n.d.-a).

Summary

This discussion paper presents the findings of the desktop review to support the National Workplace Initiative (NWI). The purpose of the desktop review was to identify potential datasets, indicators, measures and metrics to track Australia's progress in ensuring mentally healthy workplaces over time.

Chapter 1 provides a brief introduction and Chapter 2 describes our methods. Chapter 3 presents our findings in relation to datasets, and instruments, surveys and panel studies and Chapter 4 presents some potential criteria for shortlisting these findings to create an agreed set of indicators and data sources for the monitoring framework. Chapter 5 outlines issues for consideration in the design of the monitoring framework and Chapter 6 presents the discussion points (listed below) and next steps.

It is intended that this discussion paper will provide a starting point for consultation with the NWI team and with experts and stakeholders closely engaged with the NWI.

Discussion points

Issue 1 – Available data sources

Q1: Are any relevant Australian public data sources missing from our desktop review (Section 3.1)?

Q2: We anticipate that the baseline report will draw on relevant Australian public data sources regardless of when the data were collected (Section 3.1) rather than excluding data collected before a given cut-off date. What is your view of this approach?

Issue 2 – Data repository and data collection mechanisms

Q3: What is your view about the NWI building a national data repository of the data collated for the baseline report of current state and adding to this repository in future years?

Q4: We anticipate that businesses will not be asked to submit mentally healthy workplace monitoring data to the NWI. Consequently, the main data sources for the monitoring framework will be those collected regularly at a national or jurisdictional level (Section 3.1). This data may be supplemented by dedicated new data collections either by inserting additional questions into existing surveys or by commissioning new surveys. What is your view of this approach?

Q5: What can you say about potential challenges that may arise as different data sources and instruments are collated to provide a national overview?

Issue 3 – Available instruments

Q6: Are any relevant instruments with a particular focus on mentally healthy workplaces missing from our desktop review (Sections 3.2 and 3.3)?

Issue 4 – Criteria for dataset and indicator selection

Q7: The draft criteria to support selection of datasets and indicators, measures and metrics are included in Section 4.2. Do you agree with these criteria in principle? Is there any way to simplify or prioritise these criteria? Are there additional criteria that should be considered?

Issue 5 – Structure of the monitoring framework

Q8: We propose that the monitoring framework should monitor processes and outcomes at all levels, namely workplace (micro-level) factors, external (meso-level) influences and system or national/jurisdictional influences (macro-level). What is your view of this approach?

Q9: Our desktop review has highlighted that there are many ways that indicators can be clustered or organised. We propose that the monitoring framework uses the NWI pillars (Protect - keep people

psychologically safe at work; Respond - support people with mental health conditions; and Promote - build a positive workplace culture) and the five domains we have derived from the NWI documentation (namely, communication, culture, job design, workplace design and leadership) as building blocks to align a mix of leading and lagging indicators. What is your view of this approach? Is there a need to identify unique domains at the meso and macro levels or is it preferable to maintain the suggested five-domain structure across the levels, for consistency?

Issue 6 – Amplifying the work of others

Q10: Is a value proposition specific to the monitoring framework necessary or are the guiding principles outlined in Section 5.2.1 sufficient? What amendments can you suggest?

Q11: A guiding principle of the NWI is to amplify the work of others. What elements of the Safe Work Australia National Return to Work Strategy Measurement Framework (Safe Work Australia 2019) and the SIRA Recovery Through Work Measurement Framework (State Insurance Regulatory Authority 2021) would you like to see adapted for inclusion in the NWI monitoring framework?

1   Introduction

The Australian Government announced in 2019-20 a $11.5 million investment over four years for the National Workplace Initiative (NWI), **to develop a nationally consistent approach to mentally healthy workplaces in Australia**. This is a collaborative process led by the National Mental Health Commission (the Commission) with input from the Mentally Healthy Workplace Alliance (MHWA) and stakeholders from business, union, government, workplace health and mental health sectors. The goal of the NWI is to align stakeholder activity in this area into a coherent and comprehensive suite of supports for organisations. This will primarily occur through:

- development of a digital platform to connect organisations and businesses with the right information and supports, and

- implementation of activities to align stakeholders with the national approach through, for example, guiding principles, in-depth resources, and policy advice.

Places of work play an important part in the lives of many Australians and there is the opportunity to ensure that workplaces are mentally healthy through providing an environment that supports positive workplace interactions which may contribute to improved mental health. In the past, approaches to workplace mental health have been perceived to be individually focused; however, developing a mentally healthy workplace requires a multifaceted approach that extends beyond individuals, to teams and the wider organisation. The NWI aims to assist employers to create an environment, structures, systems and policies that contribute to a mentally healthy workplace and to influence systems change to create and sustain mentally healthy workplaces. This is a complex undertaking, and a monitoring framework is needed to capture meaningful outcomes at a national level and support continual improvement at all levels of the system to progress positive change over time. (National Mental Health Commission 2021)

1.1   Purpose

The NWI requires:

- A monitoring framework with measures and metrics that will inform future national benchmarking of mentally healthy workplaces, across all Australian industries and businesses such as sole traders, small and medium-sized enterprises, and large organisations.

- Where available, this monitoring framework will be populated with current baseline measurements and historic data.

The purpose of the desktop review is to identify **potential datasets, population measures and metrics** to track Australia's progress in ensuring mentally healthy workplaces over time.

This discussion paper has been developed to gather early feedback from stakeholders about the findings of the desktop review and how they may inform the development of a monitoring framework for future national benchmarking of mentally healthy workplaces. This monitoring framework will be populated to reflect the current baseline state. It presents a set of discussion points posed as questions about possible ways forward, to focus feedback on several major issues. The audience for this discussion paper includes the NWI team, subject matter experts and people with deep knowledge of the mentally healthy workplaces sector.

1.2   Background

The Blueprint for Mentally Healthy Workplaces (National Mental Health Commission 2022) explains the foundations of a mentally healthy workplace (Figure 1) and provides the strategic underpinning for the monitoring framework. It outlines principles to guide businesses and organisations to develop mentally healthy environments in different workplace and industry contexts, based around three pillars: **protect,**

respond and promote. This is an integrated approach that aims to protect workers by eliminating or minimising risks, respond to the support needs of people experiencing mental ill-health and promote the positive aspects of work. For each of the pillars, the Blueprint highlights actions that can be taken. The pillars overlap and interact with each other; for example, existing legal obligations for businesses and organisations - such as work health and safety (WHS) regulations - relate to the 'protect' and 'respond' pillars.

Figure 1   Foundations of mentally healthy workplaces

Foundations of mentally healthy workplaces

Protect
Identify and manage work-related risks to mental health.

Promote
Recognise and enhance the positive aspects of work that contribute to good mental health.

Respond
Build capability to identify and respond to support people experiencing mental ill-health or distress.

These pillars overlap, with action in one of these areas often leading to improvements in others.

Blueprint for Mentally Healthy Workplaces   National Workplace Initiative

The NWI Draft Theory of Change and Evaluation Models Consultation Paper outlines the proposed approach to monitoring workplace change **at the national level**.

> *Given the impact of factors at different levels, creating a nationally consistent approach to mentally healthy workplaces requires broad system change from change in individual knowledge, capability, and action through to systemic reform in the systems that support and facilitate mentally healthy workplaces. (National Mental Health Commission 2021)*

Organisations will have varying levels of maturity as mentally healthy workplaces. Their continual improvement as they progress along a continuum from awareness, commitment, action to outcomes is of interest. The monitoring framework will drive organisational, and systems change through tracking **lead and lag indicators** (National Mental Health Commission 2021) across relevant domains. The dynamic process of developing the monitoring framework seeks to identify opportunities to monitor and evaluate progress to date and aspirational targets for future monitoring and evaluation. The intended users of the monitoring framework are policy makers, service funders and industry leaders, i.e. people making decisions about where support is required, which supports should be funded and strategic priorities for action. Therefore, in designing the monitoring framework, it must meet the needs of this audience and focus on, 'What types of decisions could this framework support?'

2 Desktop review methods

The use of measures and metrics to collect data about mental health in the workplace is important for informing continuous improvements that sustain a mentally healthy workplace (O'Neill et al. 2022). Data can help identify where action is required as well as any unintended consequences of interventions. This information can help inform policy priorities or practice changes to keep the continuous improvement process on course.

2.1 Purpose of the desktop review

Initially, we developed a research question for this review using the PICO (National Collaborating Centre for Methods and Tools 2022) (population, intervention, comparator and outcome) framework and then modified it to suit our requirements, as the focus of the search is a little different from the usual 'what works'. In the case of this desktop review, we were essentially seeking information on 'what works' *to measure what works*, in relation to protecting, promoting, and responding to, workplace mental health. Table 1 below gives an outline of the main question components.

Table 1 Components of the research question using PICO framework

Component	
Population	Individuals, teams, managers/leaders, organisations, industries, sectors
Intervention	Protection, promotion, response to workplace mental health: measurement of outcomes
Comparator	No measurement reported or limited appropriate measurement methods
Outcome	Appropriate (valid, reliable, relevant and timely) measurement of outcomes of mental health initiatives in workplace settings; sensitivity to change in outcomes over time

Thus, the research question guiding the desktop review was:

'What existing datasets, indicators, metrics and measures are available to assess the outcomes of interventions to protect, promote or respond to workplace mental health, at the individual, team, manager/leader, organisational and industry/sector levels?'

Although this question encompasses impacts across the spectrum of potential influence, we note that the Commission's focus in the NWI is on driving <u>organisational-level and system level change rather than behaviour change for individual people</u> (although there may be an indirect effect).

Thus, the purpose of the Stream 1 desktop review was to identify the most effective and appropriate instruments and data sources to track mentally healthy workplaces in Australia, including workplaces for sole traders, small businesses/organisations and medium to large businesses/organisations. A diagram illustrating the desktop review process is provided in Appendix 1.

2.2 Search strategy

The desktop review has focused on grey literature searches for two primary reasons. Firstly, this strategy was adopted after early searching of peer-reviewed literature demonstrated a focus on either theoretical papers or studies of individual-level interventions to support workplace mental wellbeing rather than organisational strategies, programs or interventions. Secondly, the grey literature was the most likely source of information about real-world interventions in industries, organisations and workplaces, rather than research projects. Information about measures and metrics to track mentally healthy workplaces has been obtained through Google searches using terms and parameters, with a purposive search of organisational websites, and searching reference lists of relevant reports. Google searching and website searching was undertaken concurrently, each strategy helping to inform the other. We searched report reference lists and consulted with our technical advisers to identify additional documents and fill any gaps in the initial web searching.

2.2.1 Web searches

The SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) tool was used to define elements of our search (Cooke et al. 2012). Sample, Phenomenon of Interest and Evaluation appear to be the most important aspects of the search to define, and we have included examples (not an exhaustive list) of terms in Table 2. In addition to the SPIDER approach, we identified potentially useful search terms from background literature provided by the Commission.

Our inclusion criteria encompassed published literature of any study design and research type, including qualitative studies and surveys. While our searching focused on Australian sources as these were likely to be relevant to the context of the NWI we included purposive searches for materials from Canada, New Zealand, UK and USA, countries we believed were likely to have relevant, English-language resources and examples of good practice in monitoring and evaluating interventions to improve mentally healthy workplaces.

Table 2   SPIDER method for defining search terms

Search element	Examples of terms
Sample	Employee, worker, staff, sole trader, manager, leader, organisation, business, industry, enterprise, SME
Phenomenon of interest	Mental health, well (-) being, stress, work environment, job satisfaction, mental illness
Design	Any
Evaluation	Outcome, measure, tool, instrument, questionnaire, survey, metric, indicator, data(set)
Research type	Any

Terms were entered into the Google search engine to identify documents and resources for review. Search terms were combined with relevant organisational names to identify any additional measures or metrics of mentally healthy workplaces. The first 20-30 results for each search term were scanned to identify potential organisations for inclusion in the desktop review. Searching was an iterative process with search terms reviewed as the searches progressed to identify the most useful terms.

Google only allows up to 32 words to be included in a search so a single search using all the terms was not possible. Consequently, terms were grouped to enable discrete searches. Boolean operators were used to combine search terms where terms were combined with OR, and groups of terms from different categories combined with AND. For example (workplace or organisation) AND ("mental health" or wellbeing or wellness) AND (dataset, metric or survey or measure or "outcome suite" or instrument or tool).

The tilde symbol (~) was also used to broaden searches. The tilde (~) operator allows Google to search both for a specific word and for the word's synonyms. For example, ~enterprise will also generate company, business, organisation, etc. It also searches for the term with alternative endings, e.g., ~data will also generate the term dataset (refer to Appendix 2 for examples of organisational websites included in searches).

Additional parameters used to improve the efficiency of Google searches included using specific file type or web-site identifiers e.g.,

- Filetype: pdf
- Site: gov.au
- Site: org.au

2.2.2 Purposive searches

Initial purposive searches were completed for Australian government websites: Commonwealth, State and Territory Government, predominantly departments related to mental health and employment. Websites of industry groups, businesses, insurance organisations, unions, peak body/advocacy organisations and research/academic organisations that have a known interest in mentally healthy workplaces were also searched individually and systematically, using agreed combinations of search terms. Any other national or state/territory-based organisations with a workplace mental health monitoring interest/mandate identified through discussions with the NWI team or that emerged from earlier searches were scrutinised. Purposive searches for measures, metrics and indicators (but not datasets) were also conducted for relevant government and national organisations from major English-speaking countries such as Canada, New Zealand, UK, and the USA.

2.2.3 Research librarian support

To assist with our search, we contacted a specialist research librarian with particular expertise in the fields of business and law (University of Wollongong) to identify additional strategies to source existing Australian datasets and surveys/instruments. This resulted in further search strategies including purposive searches of State Archives and Records websites and the Information and Library Science Research Network on SSRN looking for datasets. A search was completed by the research librarian for relevant longitudinal studies and business surveys. The research librarian conducted a Google search using the following terms:

- small business survey Australia wellness

- business wellbeing survey .au

- longitudinal business survey .au

- "small business" "mental health" survey or instrument

- dataset* business wellness .au

- longitudinal study ("mental health" or wellness) ("work* OR industry") site:au

This provided results for team members to explore in relation to business surveys (not government), government sites and large Australian longitudinal surveys. The following data sites were identified and subsequently searched by team members:

- https://data.gov.au/ - the central source of Australian open government data

- https://datasetsearch.research.google.com/ - a google search engine for datasets

- https://figshare.com/ - a data repository that stores and provides access to research data

- https://researchdata.edu.au/ - provides access to research data from over one hundred Australian research organisations, government agencies, and cultural institutions

- https://ada.edu.au/popular-data/ - holds over 6000 datasets from more than 1500 projects and studies

- https://dataverse.ada.edu.au/ - provides a national service for the collection and preservation of digital research data.

Search terms from general web searching were used to interrogate these databases.

2.2.4 Reference lists/snowballing

We reviewed reference lists of documents which resulted in additional sources for inclusion and used snowballing techniques to identify other relevant organisations and/or measures and metrics from reference lists of grey literature previously identified in the Google searches, including reports and electronic articles.

2.2.5 Exclusions and limitations

A desktop review reliant on website searching has limitations. Information is frequently restricted and if available, may include little detail and specificity. Many websites give no indication as to when the information on the website was last updated. We anticipate that many organisations identified may have an interest in mentally healthy workplaces, however, not be actively engaged in any form of systematic data collection.

2.3 Approach to peer-reviewed literature

2.3.1 NICE Evidence Reviews

On the advice of the NWI team the proposed umbrella review was not undertaken to reduce duplication. A comprehensive and relevant Australian literature review was already available (Harvey et al. 2014). In addition, the UK National Institute for Health and Care Excellence (NICE) released a series of comprehensive and highly relevant evidence reviews in March 2022 (National Institute for Health and Care Excellence 2022b, 2022c). A further two reviews that focused particularly on organisational change to support mental health and wellbeing were also considered. Validated instruments were identified through searching intervention study papers that were included in this small number of purposively selected international reviews specific to organisational workplace mental wellbeing/mental health (Bamberger et al. 2012; National Institute for Health and Care Excellence 2022b, 2022c; Roodbari et al. 2021). Workplace-specific individual level measures were recorded, as well as selected non-workplace-specific instruments.

Table 3 displays information regarding these reviews, including the number of papers that were identified and hand-searched. The methods sections of 91 papers (tracked in an Excel spreadsheet) were scrutinised and relevant validated instruments were identified and recorded. If the instrument had already been identified in a previous paper it was not added again to the table. An instrument was deemed relevant to this search and recorded in the table if it was *workplace-specific* and measured a construct relating to a mentally healthy workplace. Instruments were noted in the table if they appeared consistently (more than three times) in the searched papers and were identified as instruments commonly used in monitoring mental health in the workplace.

Instruments were organised into organisational, individual and non-workplace-specific categories. Indicators associated with each instrument were recorded, as well as associated outcomes. There were a few instruments specific to a population (nurses and doctors). These were not included in the table as we wanted to identify instruments that could be used across all workplaces regardless of the industry.

Table 3   Reviews searched for validated instruments

Review title and year published	Author	Included number of searched papers for instruments
Impact of organisational change on mental health: A systematic review (2012)	Bamberger	17
Mental wellbeing at work: Evidence review A Organisational universal level approaches (2022)	NICE	43
Mental wellbeing at work: Evidence review C Targeted organisational-level approaches (2022)	NICE	9
Organisational interventions to improve employees' health and wellbeing: A realist synthesis (2021)	Roodbari	22 (+6 already identified in previous reviews)
Total		**91**

2.3.2 Selected realist review search

A search of Google Scholar was conducted using the search terms 'realist review' or 'realist syntheses' and 'workplace mental health' or 'workplace wellbeing' to identify relevant realist reviews that had been published in the academic literature. A realist synthesis or realist review is a strategy for synthesising research which has an explanatory focus and is theory driven. Realist reviews seek to unpack the mechanisms that explain how an intervention works (or fails to work) in particular contexts or settings. Due to contemporary developments in mentally healthy workplaces, reviews published within the last five years (2017-2022) were considered. A total of five reviews were identified (Carrieri et al. 2020; Gray et al. 2019; Micklitz et al. 2021; Roodbari et al. 2021; Van Hees et al. 2021). However, after deliberation, (Micklitz et al. 2021) was excluded as this realist review concentrates on the circumstances that make for a successful 'mindfulness' program which was considered to be outside of our current scope. The reviews searched included:

- Roodbari et al. (2021) realist synthesis of evidence of organisational health and wellbeing interventions in order to understand the contexts in which these interventions may improve employees' health and wellbeing. They summarised the evidence into six realist program theories.

- Van Hees et al. (2021) realist review to understand the working conditions that contribute towards wellbeing and participation of employees with common mental health problems and overall understanding of the specific conditions in which work participation and staying at work occurs.

- Carrieri et al. (2020) realist review and implementation guide, of interventions that were targeted at doctors' and medical students' mental-ill health and the impact it has on the clinical workforce and patient care.

- Gray et al. (2019) realist review to synthesise evidence on workplace-based interventions at the organisational level that aimed to promote the health, wellbeing and happiness of healthcare workers. This was to identify what had been receiving attention in the field and the reasoning for it.

This purposive search of selected peer-reviewed literature was undertaken as a quality assurance check with the findings provided in Appendix 3.

3 Desktop review findings

The desktop review found that measures of mentally healthy workplaces are fairly widely used in Australia, but there is little consistency in their use, demonstrated by the number and variety of resources we found. Just over 200 items were identified in the systematic searches, about a quarter of which were Australian datasets based on routinely collected administrative data or collected via industry-specific or population surveys. Some of these datasets have potential for use in the baseline report. Existing workplace surveys and panel studies that might be sources of data for future monitoring are described. Materials that could be used as indicators, measures or metrics were also identified, and these we labelled 'instruments' (to avoid classifying them incorrectly before making a thorough assessment of their design, contents and proposed uses). They comprised three distinct groups:

- **Organisational instruments** such as questionnaires used to assess relevant aspects of an organisation (e.g., workplace culture) and/or administrative data that could be used as measures or metrics of organisational effectiveness in the realm of workplace mental health (e.g., absenteeism);

- **Workplace-specific, individual instruments** designed to be completed by employees *about themselves*, measuring employment-related psychosocial constructs (e.g., burnout); and

- **Non-workplace-specific** standardised, validated instruments designed to be completed by individuals, measuring psychosocial constructs that are relevant but not specific to workplace wellbeing (e.g., symptoms of anxiety and depression).

3.1 Available Australian datasets

Our initial assessment of workplace mental health and wellbeing datasets focused on identifying and describing sources of available Australian data that might be useful to establish a baseline level for comparison with future monitoring and evaluation efforts. In total 88 data-related documents and resources containing or referring to data were identified and entered into an 'Everything list' (an Excel spreadsheet) for further consideration. Resources that did not include reference to *available* data were eliminated from the analysis at this point, with approximately half being retained in the 'Long list' for further interrogation.

Resources that did not include *Australian* data were subsequently excluded from further analysis, leaving only Australian data sources, which we classified into two groups: those developed for national or state-based use and industry-specific data collections. The following tables provide detail about the sources of data, when the data was last collected, the frequency of data collection, sample size and validated instruments used (where applicable).

Table 4 lists 12 national and state data sources, some of which are broad-based population surveys. Three of the five annual surveys have data available from the past three years. Another five datasets are from one-off data collections and somewhat dated. The remaining two are periodical collections: the 2018 Australian Bureau of Statistics (ABS) data on workplace injuries (including an item on stress-related injury) and datasets collected in 2017 and 2020 to evaluate the NSW Mentally Healthy Workplaces Strategy.

Table 4   Australian data sources collected at national or state level, by year last collected

Name	Source	Population	Latest available	Frequency	Sample size	Description
Household, Income and Labour Dynamics in Australia (HILDA) Survey	Melbourne Institute: Applied Economics and Social Research	Australian households occupying private dwellings	2022	Annually	17,000	A household-based panel study that collects information about economic and personal wellbeing, labour market dynamics, income and employment, health and education, and family life. **Instruments:** K-10, SF-36, CD-RISC, Canadian GSS
National Dataset (NDS) for Compensation-based Statistics	Safe Work Australia	Employees and managers	2021	Annually	n/a	The NDS lists a standard set of data items, concepts and definitions for inclusion in workers' compensation systems operating in Australia. Launched in 2004 the third edition of this dataset became effective from 1 July 2005. Data is collected by all jurisdictions and Safe Work Australia reports nationally on the incidence and severity of occupational injury and disease. The NDS is comprised of accepted workers' compensation claims, which are presented by the financial year of lodgement. A financial year begins on 1 July and ends on 30 June. The aim is to assist in the prevention of occupational injury and disease by producing uniform national and nationally comparable indicators of occupational health and safety performance and experience.
Indicators of a Thriving Workplace Survey	SuperFriend	Employees and managers	2021	Annually	10,000	40 scientifically validated items which measure characteristics of mentally healthy workplaces. Survey respondents rate the extent to which each characteristic describes their current workplace, using a 5-point Likert scale. Characteristics are divided into 5 domains: connectedness, culture, capability, leadership and policy. For more information about the survey instrument, see Section 3.2.
Work Shouldn't Hurt Survey	Australian Council of Trade Unions (ACTU)	Representative sample of Australian workers	2021	Annually	1,540	National survey including questions on mental health in the workplace. Questions include, 'Why I didn't take leave', conditions at work, staffing levels, safety at work, support, recognition and reward.

Name	Source	Population	Latest available	Frequency	Sample size	Description
NSW Benchmarking Tool	NSW Government	Workplaces representative of NSW by industry, region and size	2020	2017 and 2020	2,000	The tool measures the capability of employers to create mentally healthy workplaces, identifies the initiatives most needed, and enables future evaluation of the success of the NSW Mentally Healthy Workplaces Strategy. For more information about the survey instrument, see Section 3.2.
Work-related Injuries	ABS	People who experienced a work-related injury or illness	2018	Five times since 2000	563,600	The Multipurpose Household Survey, supplement to the Labour Force Survey 2017-18, includes data relating to mental health (i.e., a question relating to 'stress or other mental health condition'). For more information about the survey instrument, see Section 3.2.
National Work Health and Safety Leading Indicator Survey	Monash University	Representative sample of Australian workers	2016	One-off	1,100	The survey consists of three leading indicator measures, as well as questions relating to lagging indicators, worker characteristics, job and workplace characteristics. **Instruments:** Psychosocial Job Quality Measure, OPM-MU, OHS vulnerability measures
Australian Workplace Barometer (AWB)	University of South Australia	Employed workers over the age of 18	2015	One-off*	5,743	The AWB project, conducted in 2014-2015, collected benchmark data across six Australian states and territories using the 12-item Psychological Safety Climate tool (PSC-12) and the other instruments listed below. It built on earlier research dating back to 2009. **Instruments:** PSC-12, Job Content Questionnaire (JCQ 2.0), the Effort-Reward Imbalance Scale (ERI), Maslach Burnout Inventory (MBI), K10, Occupational Fatigue Exhaustion Recovery Scale (OFER15), Patient Health Questionnaire (PHQ-9), Utrecht Work Engagement Scale (UWES-9) *Data from the PSC-12 continues to be collected annually, is publicly reported as a factsheet, and is used in research to investigate the relationship between psychosocial risk climate and employee mental health and wellbeing outcomes. More information is needed about whether the other AWB instruments are collected annually, how organisations are sampled or how many organisations take part in the annual surveys.

Name	Source	Population	Latest available	Frequency	Sample size	Description
National Stress and Wellbeing in Australia Survey	Australian Psychological Society	Representative sample of Australians	2015	Annually	1,731	The survey includes a Likert scale relating to workplace wellbeing including, job satisfaction, work-life balance, job interest, job stress, salary and likelihood of unemployment. **Instruments:** Warwick Edinburgh Mental Wellbeing Scale (WEMWBS), PSS, K-10, DASS-21
The State of Mental Health in Australian Workplaces	Beyond Blue in collaboration with TNS	Employees and managers	2014	One-off	1,126	The survey asks participants to respond to the following areas: the importance of physical safety and mental health, stigma around mental health, behaviour when encountering mental health conditions in the workplace, workplace support and practices to promote good mental health, and the awareness of resources available to promote good mental health.
People at Work Survey	QUT, ANU and partner organisations	Employees and managers	2007	One-off**	n/a	A risk assessment survey tool that identifies 13 psychosocial hazards (7 relate to 'Job Demands' and 6 to 'Job Resources'). **This research was recently translated into a self-assessment tool available online. More information is needed about the prospects for compiling the data for ongoing monitoring.
Employee Sentiment Survey	Irving Saulwick	Wage and salary earners or individuals actively seeking employment	2001	One-off	1,000	The national telephone poll covers topics such as job security, job satisfaction, treatment by employers, fairness of pay, workplace safety, employer loyalty, working hours, stress at work, entitlements of workers in the event of the firm's collapse, the employment outlook, and confidence in finding a job.

Table 5 lists 15 industry-specific data collections. The industries for which workplace mental health and wellbeing data are available include veterinary science, police and emergency services, healthcare workers, public service, wild-catch fishers and the transport sector. Most datasets are from one-off surveys. Seven were collected in the last three years. Validated instruments are included in eight of the datasets.

As well as identifying stand-alone data collections, the desktop review also considered the availability of large, linked administrative datasets, such as the Multi-Agency Data Integration Project (MADIP) (Australian Bureau of Statistics 2015). At this stage it is unclear whether any of these initiatives will include items that could potentially be used as baseline indicators of mentally healthy workplaces, although there may be the possibility of further linkage with relevant indicators from other data collections. As the selection of indicators for this project progresses, we will revisit those linked dataset initiatives, because their development is still under way.

Table 5   Australian data sources collected at industry level, by year last collected

Name	Source	Population	Latest available	Frequency	Sample size	Description
Mental Health and Wellbeing in Music and Live Performing Arts survey	Support Act	Individuals working in music and live performing arts	2022	One-off	1,304	The survey includes questions about demographics, mental health, factors impacting on mental health, use of services and what services people would like to see available in the future **Instruments:** K-10 and MK-KF
People Matter Employee Survey	NSW Public Service Commission	Public sector employees in NSW	2021	Annually	400,000	The survey asks employees about their experiences with their work, workgroup, managers, and organisation. Results are grouped into management practices and reported under four domains: purpose and direction, work environment, enabling practices and leadership. For more information about the survey instrument, see Section 3.2.
Resources and Energy Industry Workforce	Australian Resources and Energy Group in collaboration with Mindshape	Resource and energy employees	2021	One-off	1,102	The survey includes questions about alcohol use, distress, decision making styles, impact of life events and sleep. **Instruments:** DASS, AUDIT, K-10, BRS, Brief-COPE, GDMS, WHOQOL
Voice of Profession Survey	Australian Veterinary Association in collaboration with SuperFriend	Individuals working in vet science	2021	One-off	2,540	Questions relate to veterinary mental health and wellness, psychosocial risk factors, barriers to help seeking behaviours and recommendations for the health and wellbeing of the profession.
APS Employee Census	Australian Public Service (APS)	APS employees	2021	Annually	109,537	The census is used to collect confidential attitude and opinion information from APS employees on important issues in the workplace. Areas considered in the survey include employee engagement, leadership, communication and change, workplace conditions, inclusion, wellbeing and unacceptable behaviour. For more information about the survey instrument, see Section 3.2.

Name	Source	Population	Latest available	Frequency	Sample size	Description
Small Business and Mental Health Survey	Australian Government: Department of Industry, Science, Energy and Resources	Small business owners	2020	One-off	1,015	The survey consists of attitude and behaviour questions and open-ended questions. Part A includes qualifying questions such as size of business and age. Part B looks at small business stressors. Part C asks about current resources. Part D looks at barriers. Part E relates to demographics and current health.
Frontline Health Worker Survey	Department of Respiratory Medicine, Alfred Hospital, Australia	Health care workers	2020	One-off	10,000	Information collected includes demographics, home life details, professional background, work arrangements, the impact of the COVID-19 pandemic on employment and finances, organisational leadership, workplace change and health and recreational habits. **Instruments:** GAD-7, PHQ-9, IES-6, MBI, PTSD scale
Quant Questionnaire	McNair yellowSquares commissioned by the Department of Industry, Science, Energy and Resources	Small business owners	2020	One-off	1015	Questions in the online survey relate to, self-assessment of stress, strategies in place to support mental wellbeing, frequency of issues and barriers to seeking help. The survey is supported by in-depth interviews.
Driving Health Telephone Survey	Monash University	Transport and logistics sector	2020	One-off	1,500	The telephone survey includes questions designed to examine an extended list of determinants from the personal, occupational, workplace environment, regulatory, lifestyle and health risk domains. **Instruments:** Audit-C 3, sleep disorders screening questionnaire, SF-12
Leading the Way - Mental Health and Wellbeing: the minimum dataset	Victorian Public Sector Commission	Public sector employees in Victoria	Developed in 2020	n/a	n/a	The survey is designed to provide insights into the conditions, culture and psychological safety of workplaces. For more information about the survey instrument, see Section 3.2. **Instruments:** The mental health self-assessment tool (based on the Canadian standard)
Survey tool not named and not available	MYOB in collaboration with Beyond Blue and Smiling Mind	Small business owners	2019	One-off	757	A survey of small business operators to understand the extent to which mental health conditions, such as depression and anxiety, affect the small business community and how much this relates to running a business.

Name	Source	Population	Latest available	Frequency	Sample size	Description
Answering the Call	Beyond Blue in collaboration with Uni of WA and Roy Morgan Research.	Police and emergency services	2018	One-off	21,000	The survey measures several aspects of mental health and wellbeing and includes standardised instruments. **Instruments:** AUDIT-C, PCL-5 PTSD scale, a short form of the Warwick-Edinburgh Mental Wellbeing Scale, K-10
National Survey of the Health, Wellbeing and Safety of the Commercial Fishing Industry	Fisheries Research and Development Corporation	Wild-catch fishers	2018	One-off	872	The survey provides a baseline for the state of the wild-catch industry members across several indicators, including physical and mental health, factors affecting health and safety, factors affecting levels of stress, health and safety behaviours, and access to health services and information. **Instruments:** K-10
Mentally Healthy Survey (data collection tool not available)	Never Not Creative in collaboration with UnLtd and Everymind	Individuals working in the creative, media and marketing industry	2018*	One-off	1,800	A survey to bring transparency to the mental health issues affecting individuals in the creative, media or marketing industries and to establish attitudes towards mental health. **Instruments:** DASS *Data collection currently in progress
The High Performing Workplaces Index	Australian School of Business: the University of NSW	Australian services sector	2010	One-off	5,600	The HPW Index is derived from 18 measures of organisational performance, grouped into six categories: profitability and productivity, innovation, employee experience, fairness, leadership and customer orientation. For more information about the survey instrument, see Section 3.3.1.3.

Discussion Point

Issue 1 – Available data sources

Q1:   Are any relevant Australian public data sources missing from our desktop review (Section 3.1)?

Q2:   We anticipate that the baseline report will draw on relevant Australian public data sources regardless of when the data were collected (Section 3.1) rather than excluding data collected before a given cut-off date. What is your view of this approach?

Issue 2 – Data repository and data collection mechanisms

Q3:   What is your view about the NWI building a national data repository of the data collated for the baseline report of current state and adding to this repository in future years?

Q4:   We anticipate that businesses will not be asked to submit mentally healthy workplace monitoring data to the NWI. Consequently, the main data sources for the monitoring framework will be those collected regularly at a national or jurisdictional level (Section 3.1). This data may be supplemented by dedicated new data collections either by inserting additional questions into existing surveys or by commissioning new surveys. What is your view of this approach?

Q5:   What can you say about potential challenges that may arise as different data sources and instruments are collated to provide a national overview?

3.2   Workplace surveys and panel studies

In this section we list surveys and panel studies identified through the desktop review in respect to their functioning as *potential data collection tools or instruments* regardless of whether Australian data is available. (Where the surveys or panel studies include available Australian data, they are also recorded in the previous section.)

Table 6 presents a summary of population surveys: those which collect (or have previously collected) relevant information about mentally healthy workplaces across a broad-based, representative sample of the population of employed people. Where relevant, instruments included in the survey questionnaires are listed. Further information about these instruments can be found in following sections of this report. Three population surveys that look potentially useful for the purposes of the NWI monitoring framework are described in more detail below.

In 2015, SuperFriend developed their 'Indicators of a Thriving Workplace' survey in partnership with the superannuation and life insurance industry to promote mentally healthy workplaces for industry fund members and employers. The survey was developed by local and global workplace mental health experts, drawing from organisational psychology best practice and validated by the University of Queensland. Respondents rate the extent to which each of the 40 scientifically validated characteristics ('indicators') of mentally healthy workplaces are present in their current workplace, using a 5-point Likert scale. The questions are divided across five domains as follows: connectedness, culture, capability, leadership and policy. The outcome of the Thriving Workplace Index is a score that allows measurement of an organisation's current state of mental health and wellbeing and benchmarks results to industry and national data.

SafeWork NSW developed a 'Benchmarking Tool' in 2017 to help evaluate the NSW Mentally Healthy Workplaces Strategy. The tool was developed in collaboration with academics, mental health experts and a market research organisation. The 2017 survey included responses from 2,000 NSW employees which has become the baseline for the NSW Mentally Healthy Workplaces Strategy. The Tool was validated in 2020 through a quantitative and qualitative pilot study. The Benchmarking Tool assesses 24 attributes of a mentally healthy workplace across four themes including policy and processes, managing risk, education and training and support services. Each theme is assessed by employers and workers using five capability segments scored from basic awareness to integrated and sustained action.

The ABS have collated data relating to work-related injuries since 2014. The data are compiled from the Multipurpose Household Survey which is a supplement to the monthly Labour Force Survey. The data is collected by interview using Computer Assisted Telephone Interviewing (CATI) and data are recorded directly into an electronic questionnaire. Respondents must be a minimum of 15 years of age but exclude members of the Australian Defence Force and overseas residents. In 2018, 28,200 respondents completed the questions relating to workplace injury. All statistics are benchmarked to the Estimated Resident Population for December 2017 ensuring survey estimates are consistent with the estimated in-scope population by state, part of state, sex, age and labour force status. Specific data relating to work-related injuries are classified according to Safe Work Australia's Type of Occurrence Classifications System (TOOCS).

Table 6   Population surveys

Name	Developer/Owner	What is measured	How is it measured
ACT Online Employee Health and Wellbeing Survey	ACT Government	Overall physical and mental health and wellbeing	Questions about eating, hydration, physical activity, time spent sitting, alcohol consumption, smoking habits and emotional wellbeing. Mental health measures include the K10 plus six other questions about mental health, including initiatives employees would like to see implemented in the workplace.
APA Work and Well-Being Survey 2021	The American Psychological Society	Workplace stress and contributing factors	Questions about employee stress related to work and employee expectations relating to mental health, specifically in the context of the pandemic and changing priorities. Domains include employee perspective and experiences, physical and mental wellbeing, employee stress, psychologically healthy workplace, equity, diversity, inclusion, representation, and demographics.
CIPD Good Work Index	CIPD	Job quality	Annual UK survey that explores issues of health, wellbeing, absence, presenteeism and leaveism, work-related stress and mental health.
Health and Wellbeing at Work	Department for Work and Pensions in collaboration with NatCen Social Research (UK)	Absence due to mental ill-health and return to work	Questions about factors influencing the ability of employees to remain in work whilst managing health issues or conditions, and to return to work when having been off sick from their job for some time. Includes quality of working life statements.

Name	Developer/Owner	What is measured	How is it measured
Household, Income and Labour Dynamics in Australia (HILDA) Survey	Melbourne Institute: Applied Economics and Social Research	Survey of individual characteristics of workers and their employment conditions that may link to mental health	A household-based panel study that collects valuable information about economic and personal wellbeing, labour market dynamics and family life. It collects information on many aspects of life in Australia, including household and family relationships, income and employment, and health and education.
Indicators of a Thriving Workplace Survey	SuperFriend	Positive and negative factors in the workplace affecting mental health	40 scientifically validated characteristics of mentally healthy workplaces. Characteristics divided into five domains: connectedness, culture, capability, leadership and policy.
Mental Health at Work Survey	Mind Share Partners	Lived experience of mental illness and stigma in US workplaces	Mental health symptoms are measured using an abridged version of the Mental Health Screening Form-III.
Mental Health in the Workplace Survey	Minter Ellison	Worker mental health	n/a
Mental Health Pulse Survey	Disability Management Employer Coalition	Organisational implementation of mental health strategies, their impact on stigma and return to work	Questions about workplace mental health programs, in particular the current state of mental health in the organisation and what resources employers are offering to address the mental health needs of their employees.
Mentally Healthy Workplaces in NSW Benchmarking Tool (BMT)	NSW Government: SafeWork NSW	Overall mental health status of a workplace	This is a tool that measures the capability of employers to create mentally healthy workplaces and identifies the initiatives most needed
National Work Health and Safety Leading Indicator Survey	Monash University	Work injury and illness	Questions about worker characteristics, job and workplace characteristics. **Instruments:** Psychological Job Quality Measure, Organisational Performance Metric - Monash University and OHS Vulnerability measures
National Survey of Mental Health and Wellbeing	Australian Institute of Health and Welfare (AIHW)	Level of mental illness / disorder in the Australian population	Questions about the prevalence of mental ill-health based on individuals' self-reported health status.
New Zealand Workplace Barometer	Massey University	Psychological risk factors in the workplace	Questions about job demands, bullying, resources, autonomy and inclusion and work-related issues: engagement, satisfaction performance and intentions to leave. Includes the Psychosocial Safety Climate.
Small Business Owner Survey	McNair yellowSquares, commissioned by Australian Government Department of Industry, Science, and Resources	Awareness of mental health issues and support among small business owners	Questions about self-assessment of stress, strategies in place to support mental wellbeing, frequency of issues and barriers to seeking help. The survey is supported by in-depth interviews.

Name	Developer/Owner	What is measured	How is it measured
State of Mental Health in Australian Workplaces	Beyond Blue in collaboration with TNS	Mentally healthy workplaces	Survey provides a detailed snapshot of the state of mental health in Australian workplaces with questions about the importance of physical safety and mental health, stigma around mental health, behaviour when encountering mental health conditions in the workplace, workplace support and practices to promote good mental health and awareness of resources available to promote good mental health.
Work Health Survey	Mental Health America	Employee wellbeing and workplace culture	16 questions about financial insecurity, burnout, supervisor support, workplace stress, and mental illness.
Work-Related Injuries (Multipurpose Household Survey, supplement to the Labour Force Survey 2017-18)	ABS	People who experienced a work-related injury or illness	Question relating to stress or other mental health condition.
Work Shouldn't Hurt Survey	Australian Council of Trade Unions (ACTU)	Experience of work	Report by the peak union body on the extent and nature of injuries at work across Australia, highlighting areas where action is required. The survey includes questions on mental health along with other WHS risks. Not specifically targeted at mental health but does collect information on mental illness at work.

Industry-specific surveys are listed in Table 7. They covered a variety of industries such as the public service (e.g., bureaucrats, police, teachers, healthcare providers), non-government organisations (e.g., United Nations), primary industries (fishing, farming), architecture, transport and logistics, music and performing arts, and IT. Three large-scale, annual surveys of public servants are described in more detail below.

The NSW Public Service Commission developed the People Matter Employee Survey in 2016 as a comprehensive employee experience questionnaire. It includes practical and action-oriented questions which draw upon evidence-based models of employee experience. The survey asks employees about their experiences with their work, workgroup, managers, and organisation. Results are grouped into management practices and reported under four domains: purpose and direction, work environment, enabling practices and leadership. Scoring of the questions is carried out using a five-point Likert scale from 'strongly agree' to 'strongly disagree'. The survey is open to all NSW public sector employees on an annual basis and feedback helps to identify strengths and opportunities for improving work practices at the organisational level and the wider NSW public sector. The survey includes questions relating to empowerment, sense of wellbeing, fulfilment, respect, team spirit and inclusion and diversity.

The Victorian Public Sector Commission has developed 'Leading the Way' as a strategy to improve health and safety in the public sector. The strategy is the shared vision of Government departments, public sector organisations and unions. Developed in 2020, it includes the mental health and wellbeing minimum dataset which provides a baseline for Victorian public sector organisations to measure improvement or comparison against similar organisations. It includes lead indicators (e.g. number of audits completed and staff participation in wellbeing programs) and lag indicators (e.g. number of critical events or claims frequency). It also includes routinely collected data from WorkSafe Victoria relating to mental injury claims, bullying and work pressure.

The Australian Public Service carries out an annual survey of its employees called the APS Employee Census. Developed in 2021 the survey is used to collect confidential attitude and opinion information from employees on important issues in the workplace. Responses assist the Australian Public Service to evaluate the state of the organisation's workforce and results are presented on the Australian Public Service Commission website and in the annual State of the Service Report.

The APS Employee Census is an online survey and includes 137 questions grouped into 14 sections following the Job Demands-Resources model (JD-R). Each section addresses one aspect of working as a Commonwealth public servant and includes questions about job demands, strain, resources and motivation. The questions are asked on a five-point agreement scale which contribute to an overall index score that addresses whether employees feel willing and able to be innovative, and whether their agency has a culture which enables them to be so.

Table 7   Industry-specific surveys

Name	Developer/Owner	What is measured	How is it measured
Architectural Work Cultures Survey	Association of Consulting Architects Australia	Wellbeing at work: work identity, support and work culture	Questions about work-related wellbeing (social, physical and emotional); professional identity; perceptions of support; and the impact of work cultures, norms and practices on individual wellbeing. **Instruments:** Basic Psychological Needs at Work Scale, Oldenburg Burnout Inventory, Careers Futures Inventory, Career Satisfaction Scale, PHQ-4 and the Personal Wellbeing Index.
Best Practices in Health Care Employer Survey	USA Willis Towers Watson	Organisational performance and employee experience	Completed by employers and reflects health program decisions and strategies and expected future changes.
Driving Health Telephone Survey	Monash University	Physical and mental health of truck drivers	Questions cover determinants of personal, occupational, workplace environment, regulatory, lifestyle and health risk domains.
Frontline Health Worker Survey	Department of Respiratory Medicine, Alfred Hospital, Australia	Mental illness in frontline health care workers and impact of COVID 19	**Instruments:** Generalized Anxiety Disorder Scale-7 (GAD-7), Patient Health Questionnaire-9 (PHQ-9), abbreviated Impact of Events Scale-6 (IES-6), abbreviated Maslach Burnout Inventory (MBI) and abbreviated Connor-Davidson Resilience Scale-2.
Mental Health and Wellbeing in Music and Live Performing Arts Survey	Support Act in conjunction with the Centre for Social Impact, Swinburne University	Mental health and wellbeing status: psychological distress and mental health conditions	Questions about demographics, mental health, factors impacting on mental health, use of services and what services people would like to see available in the future.
Mental Health Self-Assessment Tool	Victorian State Government	Psychological health and safety management in the Victorian Public Sector	Mental health self-assessment tool based on the Canadian standard. There are 32 questions over five parts: framework (policy/system), planning, implementation, processes and evaluation.

Name	Developer/Owner	What is measured	How is it measured
National Survey of the Health, Wellbeing and Safety of the Commercial Fishing Industry	Fisheries Research and Development Corporation	Stress and poor mental health / health and wellbeing	Questions about physical and mental health, factors affecting health and safety, factors affecting levels of stress, health and safety behaviours, and access to health services and information.
OSMI Mental Health in Tech Survey 2016	Open Sourcing Mental Illness (OSMI)	Attitudes towards mental health in tech / IT workplaces and frequency of mental health disorders	Questions regarding the mental health of the respondents, the demographics of the respondents, and employer views on mental health in the workplace.
People Matter Employee Survey (PMES)	NSW Public Service Commission	Employee experience in the Public Service	Contains items on person's work role, work group, performance and development, pay, management, the organisation, inclusion and diversity, action on survey results, grievances, misconduct, workplace bullying, sexual harassment, physical harm, discrimination, racism, open ended workplace effectiveness question, demographics.
Quick Safety Scan - Psychological Health	Safe Work SA	Psychological safety hazards on farms	Seven questions on psychological health.
School Organisational Health Questionnaire	University of Melbourne	School teacher perceived workplace morale	54 items rated on five-point Likert scale (1 = strongly disagree) averaged to single score out of five. High score indicates higher workplace morale.
United Nations Staff Wellbeing Survey	United Nations	Mental health issues and utilisation of mental health care services by United Nations staff	**Instruments**: Generalised Anxiety Disorder (GAD-7), PTSD (PCL-6), Major Depressive Disorder (PHQ-C), hazardous drinking (AUDIT-C) and workplace incivility.

3.3   Workplace-specific instruments

In the sections below, we have divided instruments according to whether they assess organisational characteristics which may promote or negatively impact workplace mental health and wellbeing, or whether they assess individuals' wellbeing, employment-related experiences or personal resources.

Organisational assessments provide information about potentially modifiable factors such as job design, systems and policies, workplace environment and culture. They also have the potential for use in measuring outcomes of organisational efforts to improve workplace mental health and wellbeing. There is an assumption that the individual-level workplace instruments have been designed to measure employees' responses to their workplaces as well as personal factors which might moderate or mediate the impacts of organisational characteristics and activities (including quality improvement efforts). [1]

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[1] Employees' mental health and behaviours can certainly *contribute* to workplace characteristics, including other employees' experience of work, and organisational culture. However, it is usually assumed that measures of employee mental health and behaviour *reflect* workplace characteristics; see for example Stuart (n.d).

3.3.1 Assessments of organisations

Most of the organisation-level instruments identified in the desktop review are designed for use in WHS risk assessment and risk management. The idea is that managers or HR departments ask employees to complete questionnaires assessing their mental health and various aspects of their work environment (e.g., physical safety, support and recognition, opportunities for professional development), experiences of work (e.g., engagement, workload pressures) and organisational culture (e.g., trust, diversity, civility and respect), and identify areas where action is needed.

Importantly, some of these tools are available with standards or norms with which an organisation's scores can be compared. Such information is useful because it helps with the interpretation of survey findings and thus the identification of areas for immediate or longer term action to address hazards and improve workplace mental health. Standards or norms can also motivate action by encouraging adherence to voluntary standards or aspirational benchmarks.

The potential of such instruments for driving quality improvement may be strengthened if they are:

- Sensitive to change over time; and
- Accompanied by advice and resources to guide action at an organisational level.

3.3.1.1 *International examples*

There are a number of international initiatives in this space which provide potentially useful instruments and examples of how to integrate these into a broader program of education and support for organisations wishing to improve their employees' mental health and wellbeing (Table 8).

The non-government organisation What Works Wellbeing, in collaboration with the UK Department for Work and Pensions, developed an employee snapshot survey to be used 'at regular intervals' to help organisations identify individuals and groups of employees at risk of low wellbeing, as well as physical or psychological hazards in the workplace which could be modified. This very short tool (What Works Centre for Wellbeing 2020) includes questions on life satisfaction, job satisfaction, physical and mental health, and perceptions of safety and support in the workplace. Results can be compared with UK benchmarks by clicking a link on the What Works Wellbeing website.

The Health and Safety Executive (HSE), the United Kingdom's national regulator for WHS, provides guidance for employers on assessing and managing workplace mental health and wellbeing. Its Thriving at Work report (Stevenson & Farmer 2017) proposed a set of six mental health core standards around work demands, control over work, information and support from colleagues and managers, encouraging positive behaviours, role clarity and understanding, and managing organisational change. It was anticipated that these core standards could be implemented relatively quickly by organisations; further, 'enhanced' standards were also provided for organisations wishing to implement best practice approaches. Resources have been published on the HSE website to assist employers in achieving these (voluntary) standards. The Health and Safety Executive (n.d) is a 35-item questionnaire for employees, designed to be used by employers to monitor working conditions and measure the impact of improvement efforts. Employees are asked to reflect on their work in the past six months only, which should enhance the measure's sensitivity to change. It is unclear how the instrument was developed or whether norms or benchmarks are available to guide the interpretation of scores when aggregated to organisation level. The Indicator Tool is complemented by a workbook for employers, Tackling Work-related Stress using the Management Standards Approach.

In the United States, the Centers for Disease Control have developed a Worksite Health ScoreCard (Centers for Disease Control and Prevention 2019) for use by organisations that wish to assess whether they have implemented evidence-based health promotion strategies. Among its 154 questions are several subsets relevant to workplace mental health, including questions on depression, stress management, sleep and

fatigue, and organisational supports. Scores can be calculated on each subset of questions and compared with average scores from a large validation study, broken down by size of organisation. The manual provides guidance on monitoring change in scores over time and using the scores to guide quality improvement goal setting and strategies. One important difference from the What Works Wellbeing approach is that, rather than asking employees to complete the measures, the CDC suggest that the organisation assembles a small team representing different organisational units and work roles, and team members try to find consensus on the responses to the ScoreCard questions.

In Canada, resources are freely available through Workplace Strategies for Mental Health (formerly the Centre for Mental Health in the Workplace) to support the implementation of the National Standard of Canada for Psychological Health and Safety in the Workplace (the Standard. They include a survey which employers can use to measure 13 domains relevant to mentally healthy workplaces. Resources to assist organisations in improving performance are also provided. The questionnaire asks employees about their perceptions of their employers' risk mitigation efforts across the 13 domains as well as six 'specific areas of concern': discrimination, bullying, unfair treatment due to mental illness, exposure to trauma in the workplace, impact of work on psychological health, and burnout. Reference norms are available from three validation studies involving a total of over 15,000 participants (Gilbert et al. 2020). Additional resources available from Workplace Strategies include a 15-item tool to assess workplace conditions associated with increased organisational risk of burnout.

Two other Canadian resources were identified. The Institute for Work & Health's Organizational Performance Metric (Institute for Work & Health 2016) asks about eight activities associated with best practice in WHS (e.g., 'Employees are always involved in decisions affecting their health and safety'). Senior managers or human resource (HR) professionals are asked to rate the organisation on the percentage of time an organisation demonstrates these practices. The tool was validated and benchmarks are available, based on data from approximately 1,400 workplaces in Ontario. This is a general WHS risk assessment tool but it demonstrates a potentially useful approach to enabling organisations to self-assess against locally established benchmarks. An OHS Vulnerability Measure, which assesses the risks for individual workers, is also available.

A report by consulting company Deloitte Canada (Deloitte 2019), documenting the returns on investment of workplace mental health initiatives, included detailed guidance on implementing such initiatives (in accordance with the Standard) and measuring their outcomes. It recommends that organisations first map their existing policies and programs onto the Standards, identify gaps and needs, and then enhance or expand their activities as required. A measurement approach based around longitudinal key performance indicators – chosen by the organisation – is suggested, along with measuring short-term progress towards goals.

Table 8   **Organisational assessments: international examples**

Name	Developer/Owner	What is measured	How is it measured
Employee Wellbeing Snapshot Survey	What Works Wellbeing in collaboration with the Department for Work and Pensions	Employee mental health	13 questions provide a quick snapshot of how people are doing with respect to different aspects of wellbeing.
HSE Management Standards Indicator Tool (MSIT)	Health and Safety Executive (HSE) UK	Systems & job design	35 questions about working conditions and their impact on worker wellbeing.

Name	Developer/Owner	What is measured	How is it measured
HSE Stress Talking Toolkit	Health and Safety Executive (HSE) UK	Experience of work, culture, systems & job design	A toolkit designed to help managers talk with workers as part of their overall approach to preventing and managing work-related stress, intended for smaller organisations. Different versions available for the construction industry, education sector and the National Health Service (NHS). It includes six 'conversations' in the domains of: demands, control, support, relationships, role and change. Each domain has four interview questions.
CDCs Worksite Health Score Card	Centers for Disease Control and Prevention	Employee mental health, experience of work, culture, systems & job design, organisation performance	154 questions across 18 topic areas including depression, stress management, sleep and fatigue and alcohol abuse. It provides guidance on evidence-based strategies for employers to promote a healthy workforce, increase productivity, and reduce the risk and associated cost of poor employee health.
Guarding Minds @ Work Employee Survey	Workplace Strategies and Canada Life	Experience of work, culture	73 questions in the 13 domains of: balance, civility and respect, leadership, engagement, growth and development, involvement and influence, organisational culture, physical safety, psychological and social support, competencies, protection, reward and workload management.
Is Your Organisation at Risk of Burnout?	Workplace Strategies and Canada Life	Systems & job design	15 questions designed to assess the organisation's exposure to the risks of employee burnout
Organisational Performance Metric	Institute for Work & Health, University of Alberta, Canada	Systems & job design, organisation performance	An eight item questionnaire on possible improvements to health and safety policies and practices in order to prevent injuries or illnesses from occurring.
OHS Vulnerability Measure	Institute for Work & Health, University of Alberta, Canada	Systems & job design	Contains 27 questions focussing on workplace hazards, policies and procedures, OHS awareness, participation in OHS.
Return on Investment of Workplace Mental Health Programs	Deloitte Canada	Organisation performance	Includes suggested KPIs for organisations to constantly improve mental health programs such as employee engagement, program costs, benefits, short and long-term mental health issues, presenteeism and disability.

3.3.1.2 Commercially available instruments and resources

Snapshot surveys of WHS psychosocial risks – varying in length, but with a similar focus on measuring both employee mental health status and potentially modifiable organisational factors – are available from numerous commercial providers (Table 9). These providers use proprietary software and content which is copyright and available only to organisations which subscribe. In addition to assessment of WHS risks, many offer a larger suite of services which often includes the assistance of a consultant in preparing action plans to address WHS hazards. Most claim that their measures are evidence-based, however, their questionnaires are based on diverse theoretical perspectives including positive psychology, self-determination theory, and cognitive neuroscience. Although these measures might be useful for individual Australian organisations, there is no real prospect of using such varied data collection platforms and approaches to measurement for establishing a baseline or ongoing national monitoring for mentally healthy workplaces.

Table 9   Organisational assessments: commercially available instruments ordered by developer/owner

Name	Developer/Owner	What is measured	How is it measured
Mental Health and Wellbeing Survey	Ai Group (Australia)	Employee mental health, experience of work, culture, systems and job design, organisation performance	Snapshot of an organisation's culture, designed to assess health and wellbeing and psychological safety of workers and workplace against the work-related factors which influence work related psychological stress and identify opportunities for improvement.
FlourishDx Work Design Survey.	People Diagnostix (Australia)	Risk assessment, strengths identification, employee mood tracking, employee perceptions of work design characteristics	FlourishDx focuses on the basic principles of risk management and offers surveys online or via a mobile app. Their offering is based on an assessment tool with wrap around education and training. It is targeted at HR professionals.
Happiness KPI	Friday Pulse (UK)	Employee mental health (happiness), experience of work, culture	Measures team happiness in organisations and aims to create an environment where people thrive. Provides a weekly happiness score in the workplace using a two minute check-in provides team and senior leaders with immediate insights into how teams are really doing.
Gallagher Workplace Wellbeing Index	Gallagher (Australia)	Employee mental health, experience of work, culture, systems and job design, organisation performance	Questions about the drivers of employee wellbeing and its associated business outcomes. It also assesses the impact of employee wellbeing in your workplace in-role performance, intentions to stay, absenteeism and engagement.
Workplace Mental Health Survey	Health Links (US)	Experience of work, culture, systems & job design	The survey rates existing mental health benefits, programs, and policies and informs initiatives over four benchmarks: workplace culture, employee benefits, training and education and equity and accessibility.
70 Questions to Ask Employees About Their Mental Health	Ocasta (UK)	Employee mental health, experience of work, culture	Publicly available list of 70 questions assessing the mental health of employees. Questions have no rating system and it is suggested that organisations choose the ones they want.
The Mental Health Pulse Template	Quantum Workplace (US)	Experience of work, culture, systems and job design	15 questions about mental health program awareness, communication and effectiveness of new initiatives, organization, leadership, and managerial support.
Work Stress Survey Questions	Question Pro (US)	Employee mental health (stress), experience of work, systems and job design	Nine main questions about job stress and stress factors.
Employee Job Satisfaction Questionnaire	SoGo Survey (US)	Experience of work, culture, systems and job design	A brief version of the larger Employee Satisfaction Survey, serves to obtain a brief snapshot of employee climate.

Name	Developer/Owner	What is measured	How is it measured
Employee Mental Health Survey Questions for a Disconnected Workplace	Survale: Talent Feedback Platform (US)	Employee mental health, systems and job design	11 questions about reactions to changes in work environment, changes in processes and mental health and stress levels.
The Happiness Index	The Happiness Index (UK)	Employee mental health (happiness), experience of work, culture	Survey includes employee voice and workplace cultural assessment.
WRAW: Workplace Wellbeing and Resilience	The Wellbeing Project (UK)	Employee mental health (personal resilience), experience of work, culture	Psychometric tool and survey to measure resilience and its impact on wellbeing. There are reports for individual employees, teams, leaders and the whole organisation.
We Thrive	We Thrive (UK)	Employee mental health, experience of work, culture	Provides a survey platform to identify where staff are getting their psychological needs met and specifically what may be preventing them from meeting other needs in a healthy, balanced way. Helps managers to identify issues and help resolve underlying issues and create an environment where their team can thrive.

3.3.1.3 Australian examples

Table 10 summarises the organisational assessments that are, or have been, used in Australia and were identified in the desktop review. Most of these were developed in Australia.

The national statutory authority, Safe Work Australia, develops national policy to improve WHS and workers' compensation. Regulation and enforcement of WHS laws and administration of workers' compensation schemes is undertaken by state and territory organisations such as WorkSafe WA and the NSW State Insurance Regulatory Authority (SIRA). As would be expected, these authorities have been active in producing useful resources for promoting workplace mental health, along with suggested measurement approaches and instruments to monitor improvements. Most have a strong emphasis on risk assessment with the goal of helping organisations meet regulatory and legislative requirements, making them most relevant to the 'protect' pillar of the Blueprint.

The WorkWell Wellbeing Insights Survey was developed for WorkSafe Victoria by EY Sweeny and enables organisations to self-assess potential psychological hazards. It is designed for use by employers (e.g., HR managers, WHS officers) and employees. The tool measures 11 factors known to affect workplace mental health and wellbeing, namely: job demands, job control, support, role clarity, workplace relationships, organisational change management, organisational justice, recognition and reward, environmental conditions, remote or isolated work, and exposure to trauma. This breadth of focus is consistent with international examples such as the HSE Management Standards Indicator Tool (UK) and the Workplace Strategies for Mental Health survey (Canada).

Results from the WorkWell Wellbeing Insights Survey are fed back to the organisation via email about two weeks after the survey closes. The report highlights the top three areas for improvement (those with the lowest scores out of ten). It is recommended that organisations conduct the survey annually, and WorkWell also provides a toolkit to assist leaders in using the information for quality improvement. There does not appear to be any normative data available for the survey itself (although there may be some for the individual instruments included in the survey), but three universities (Monash University, Melbourne University and University of SA) are compiling the survey data to evaluate the WorkWell program.

WorkSafe Queensland has taken a slightly different approach with its Psychosocial Risk Assessment Tool, which is designed to be completed by leaders within an organisation to identify potential hazards, assess them as needed, implement controls and then review them to ensure they are working as expected. It starts with an examination of organisational administrative data (e.g., patterns of sick leave use, complaints, workers' compensation claims for psychological injuries, trends in EAP usage, records of overtime) and moves on to assess psychosocial hazards across 11 domains which mirror those in the WorkWell Wellbeing Insights Survey. The tool can be used in conjunction with an employee survey.

The WorkSafe WA (2015) Psychologically Safe and Healthy Workplaces: Risk Management Approach Toolkit (WorkSafe Western Australia 2015) does not include its own employee survey but does list and describe five measures which organisations could use, including the HSE Management Standards Stress Indicator Tool. The toolkit provides useful background information and detailed guidance on conducting risk assessments and implementing interventions.

In contrast to the three previous examples, the focus of the SIRA Recovery Through Work Measurement Framework (State Insurance Regulatory Authority 2021) is very much on the 'respond' pillar of the Blueprint. It aims to measure the 'journeys' of people injured at work who either stay at work to recover, take time off to recover and return to work later, or seek new employment following recovery. It identifies a set of measures linked with organisational factors that can be modified to enhance recovery from workplace injury, summarises the evidence for those factors across four domains (personal, workplace, insurance and compensation, and healthcare), and links the measures with lead and lag indicators. Among the indicators and measures listed are some that may be relevant for preventing psychological injury; however, the main relevance of this report to the current study is its systematic approach to constructing a framework for measurement, which could usefully inform the development of the monitoring framework for the NWI.

Table 10   Organisational assessments: Australian statutory authorities

Name	Developer/Owner	What is measured	How is it measured
Risk Management Approach Toolkit	WorkSafe WA	Culture, systems and job design	A checklist of items obtained from workplace data analysis, observation and employee surveys. Organisational risk is determined through a risk assessment matrix.
Psychosocial Risk Assessment Tool	Workplace Health and Safety Queensland	Experience of work, culture, systems and job design	A comprehensive risk assessment tool including: 1. Identify hazards, 2. Assess and prioritise risk, 3. Control risks, 4. Review effectiveness of controls.
WorkWell Wellbeing Insights Survey	WorkSafe Victoria in collaboration with Monash University and the University of South Australia (SA)	Experience of work, culture	The survey provides insights into the conditions, culture and psychological safety of a workplace and assesses potential psychosocial risks. **Instruments:** included in the survey are: Organisational Performance Metric, Psychosocial Safety Climate, Psychological Safety Scale, Work-related Quality of Life Scale (WRQoL). It is part of a Work Well Toolkit.

Name	Developer/Owner	What is measured	How is it measured
Mentally Healthy Workplaces Checklist	Government of South Australia		A self-assessment tool to measure systems and practices against the Mentally Healthy Workplaces Framework to recognise what is already in place, identify gaps and inform plans and actions to make improvements. Domains include critical success factors, raise awareness, build the positives, prevent harm and manage risk and intervene early.
Recovery Through Work Measurement Framework	NSW Government, State Insurance Regulatory Authority (SIRA)	Organisation performance (specifically, rates of return to work following significant injury)	This is a package of indicators, measures and metrics to allow organisations and industries to develop their own monitoring framework. The framework allows an organisation to first respond but to also protect and promote mental health in the workplace. The resource is designed to guide the overall monitoring of work health and safety.

Oher major sources of Australian examples relevant to the NWI monitoring framework are collaborative research projects involving institutes and individual researchers at Australian universities, often working with statutory authorities or industry groups (Table 11).

One of the foundational projects in Australia was a collaboration between Safe Work Australia and the University of SA's Centre for Workplace Excellence around the Australian Workplace Barometer (AWB). Earlier studies with the AWB (starting in 2009) had established benchmarks based on data collections in three Australian states; this project enabled data collection in six states and territories with a representative sample of 5743 employed Australians (Dollard 2012). The project aimed to set national benchmarks for workplace mental health and wellbeing and build an evidence base to inform policy development and resource allocation, both nationally and at state and industry levels, and to encourage organisational best practice. The last wave of data collection took place in 2014-15.

These benchmarks continue to be used in research and are the basis for national and international comparisons on Psychological Safety Climate[2], the theory on which the AWB approach was based. Psychological Safety Climate combines and extends other theories around job stress and demands. Organisations that score highly on a measure of this construct are able to demonstrate commitment to protecting workers' mental health by ensuring job demands are manageable and resources adequate (Dollard 2012). The project's most recent factsheet was published last year (Owen et al. 2021) but does not include information about methods of data collection. Presumably, the data is collected using the PSC-12, a 12-item instrument which was validated in a representative sample of Australian workers (Hall et al. 2010). More information is needed about whether the other AWB instruments are collected annually, how many organisations take part in these annual surveys, and how they are sampled or recruited.

Also highly relevant to the NWI monitoring framework is the People at Work Project, which began in 2007 as a research collaboration among two universities (Queensland University of Technology and the Australian National University), Beyond Blue, Safe Work Australia, Comcare, and three state-based statutory authorities. The project created and validated a psychosocial risk assessment tool with questions derived from existing measures, and collected data to establish benchmarks for states and territories, sectors, industries and occupations. This work was translated in 2020 into a set of self-administered resources and a digital tool which organisations can use for self-assessment and comparison to other, similar workplaces.

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[2] See https://www.stresscafe.com.au/awbproject-278749-565613.html

Two other research collaborations provide good examples of development and implementation processes that could inform the monitoring of the NWI, although both produced tools that focus on WHS risks in general rather than mental health in particular.

The High Performing Workplaces Index is an 18-item measure which distinguishes between organisations on the basis of productivity, employee experiences, fairness and leadership, as well as innovation performance and customer experience (Boedker et al. 2011). Wellbeing, job satisfaction, emotions, procedural and distributive fairness, and people management are among the factors measured that may be relevant to mentally healthy workplaces. The instrument was used in a research project funded by the Australian Government and conducted by a consortium from the University of New South Wales, Macquarie University and Australian National University, with 78 Australian workplaces. A total of 5,661 employees contributed data on their perceptions of their organisations, which was matched with organisational data to understand the relationship between the factors measured and organisational performance. Organisational cultures focused on results, people or change tended to be linked with higher performance than those cultures focused on control (Boedker et al. 2011).

Monash University Business School, in collaboration with WorkSafe Victoria and the Institute for Safety, Compensation and Recovery Research, developed a survey to measure leading indicators of WHS. The Organisational Performance Metric – Monash University (OPM-MU) was adapted from the Canadian IWH-OPM (see Section 3.3.1.1) based on a program of research in Australian organisations and workplaces (De Cieri et al. 2016). A benchmarking report was provided to organisations that participated in the research along with customised reports for WorkSafe Victoria and participating unions. The eight-item tool is a general measure of WHS risks, but the process of validation and benchmarking provides an example of how this could be done with a tool focusing more specifically on workplace psychosocial risk assessment.

Table 11 Organisational assessments: Australian research institutes and collaborations

Name	Developer/Owner	What is measured	How is it measured
Australian Workplace Barometer (AWB) and Psychological Safety Climate Tool (PSC-12)	University of South Australia, Centre for Workplace Excellence	Psychosocial risks and employee wellbeing	The AWB project, conducted in 2014-2015, collected benchmark data across six Australian states and territories using the 12-item Psychological Safety Climate tool (PSC-12) and the other instruments listed below. It built on earlier research dating back to 2009. Data from the PSC-12 continues to be collected annually, is publicly reported as a factsheet, and is used in research to investigate the relationship between psychosocial risk climate and employee mental health and wellbeing outcomes. **Instruments:** PSC-12, Job Content Questionnaire (JCQ 2.0), the Effort-Reward imbalance Scale (ERI), Maslach Burnout Inventory (MBI), K10, Occupational Fatigue Exhaustion Recovery Scale (OFER15), Patient Health Questionnaire (PHQ-9), Utrecht Work Engagement Scale (UWES-9)
Healthy Workplace Check	University of South Australia, Centre for Workplace Excellence, with Wellbeing SA	Culture, systems and job design, organisation performance	The tool is still under evaluation and can be used to assess strengths and weaknesses to create healthy and safe workplaces.

Name	Developer/Owner	What is measured	How is it measured
People at Work Survey	QUT, ANU and partner organisations	Experience of work, culture, systems and job design	Questions on 13 identified Psychosocial Hazards (Seven Job Demands and six Job Resources).
High Performing Workplaces Index	Australian School of Business: the University of NSW	Experience of work, culture, systems and job design, organisation performance	Derived from 18 measures of organisational performance, grouped into six categories: profitability and productivity, innovation, employee experience, fairness, leadership and customer orientation. Index was developed by a research team for this initiative: CFO diagnostic (116 questions) HRM diagnostic (150 questions), Employee diagnostic (124 questions). Index was validated before use.
Organizational Performance Metric (OPM-MU)	Monash University	Culture, systems and job design, organisation performance	An 8-item questionnaire with a 5-point response scale from 1 = Strongly Disagree to 5 = Strongly Agree. Sum total score range from 8-40.

3.3.2   Assessments of employees

The instruments described in this section were designed to measure employees' mental health, experiences of work, and other work-relevant constructs, either to screen individuals for potential problems or with the goal of aggregating data to provide a snapshot of workplace mental health and wellbeing. They have also been used to complement measures of organisation-level characteristics such as culture, available support, job design factors, systems or change management. Although they draw on theory around broader psychosocial constructs, all these instruments were designed for use in workplace settings.

3.3.2.1   *Wellbeing*

Occupational wellbeing encompasses mental and physical health and encompasses both good experiences in the workplace, job satisfaction and the enjoyable aspects of work and negative aspects such as stress anxiety and burnout (Summers et al. 2020). Our search found two wellbeing tools aimed at individual workers.

The Workplace PERMA Profiler

The Workplace PERMA profiler (Kearn 2014) comes from the field of positive psychology and is based on the five pillars of wellbeing: positive emotion, engagement, relationships, meaning and accomplishments. It is a 23-item measure for individuals aimed at promoting workplace wellbeing and is freely available for non-commercial purposes after registering with the University of Pennsylvania.

Mental Health Check-Up

Developed by Ahead for Business (Ahead for Business 2022b), the Mental Health Check-up is an online tool that business owners can use for free to track their mental health status. It includes standardised assessment tools for depression, anxiety and stress (DASS), alcohol consumption (AUDIT-C) and wellbeing (Flourishing Scale). The tool aims to help business owners assess their own mental health and seek help if needed. Although the tool uses validated indicators relating to mental illness, users are informed that these are not diagnostic, and users should seek help if required.

3.3.2.2   *Psychosocial needs at work*

Self-determination theory argues that when basic psychological needs are met, humans thrive (Deci & Ryan 2000). Meeting basic psychological needs at work promotes wellbeing, procedural justice, optimism and intrinsic motivation and reduces distress (Brien et al. 2012).

Basic Psychological Needs at Work Scale

The Basic psychological needs at work scale (Brien et al. 2012) is a medium length (21 items) validated indicator to assess positive work attitude and worker wellbeing. Based on self-determination theory (Deci & Ryan 2000), it is designed to measure how well the need for autonomy, competence and relatedness are satisfied at work.

Basic Psychological Need Satisfaction and Need Frustration at Work Scale

The Basic psychological need satisfaction and need frustration at work scale (Olafsen et al. 2021) is a nine item indicator developed to assess individual psychosocial needs at work. It contains three subscales: autonomy, competence and relatedness to measure psychological needs at work. The scale helps understand the needs and frustrations of workers as the key to facilitating motivation, work functioning and wellbeing.

Professional Identity Centrality (Prominence)

Professional identity centrality (Stead et al. 2021) is a four item individual indicator relating to a workers sense of value and self-worth regarding professional identity, adapted from the identity centrality scale (Brenner et al. 2014). The scale was used as part of an architectural work cultures project through Monash University.

Job Content Questionnaire

The Karasek Job Content Questionnaire (JCQ) (JCQ Center Global 2021; Karasek et al. 1998) is a validated questionnaire that asks about the content of an individual's work tasks as well as their health risks, job satisfaction, creativity and innovation potential. Results can be compared against benchmark scores allowing assessment of job strain and active work. The instrument can be used at individual, organisational or country levels. It contains 36-49 questions, depending on what is required, and can be administered online. A JCQ2 has also been developed to assess job demand and control (JCQ Center Global 2021).

3.3.2.3   *Experience of work*

Experience of work includes direct and indirect factors that may affect workplace mental health and wellbeing, such as organisational policy and working conditions (Easton & Van Laar 2012) and perceived support from management and supervisors (Eisenberger, 1986).

Work-Related Quality of Life (WRQoL) Scale

The WRQoL Scale is a 23-item, evidence-based, psychometric scale used to assess employees' perceived quality of life at work or their experience of work (Easton & Van Laar 2012). Its aim is to assess and provide understanding of the quality of working life through six sub-scales: job and career satisfaction, general wellbeing, stress at work, control at work, home-work interface and working conditions. The WRQoL is a widely used tool across the world and can be used as part of planning interventions, monitoring experience and assessing the effect of organisational change (Easton & Van Laar 2012).

Mental Health Action Week Questionnaire

The Mental Health Action Week Questionnaire (Warner 2002) asks employees about their current and previous experiences of workplace mental health. This survey was designed by the UK Mental Health Foundation to gain an understanding of the experiences of people with a mental illness including seeking support within the workplace. It included 411 people experiencing mental health problems in the workplace. The survey asks participants to include both their current employment experience and previous employment experience.

Perceived Organisational Support

This 36-item survey assesses employees' perceptions concerning the extent to which the organization values their contribution and cares about their wellbeing (Eisenberger, 1986). Two shorter versions are available (16 items and 8 items, respectively).

3.3.2.4 Career adaptability

Career adaptability refers to how adults adjust to the changing world of work (Rottinghaus et al. 2012). Optimistic and adaptable people appear to strive higher academically, report greater comfort with their educational and career-related plans, and engage in activities that advance their level of career insight (Rottinghaus et al. 2005). McIlveen et al (2013) argued that those who scored low on career optimism and adaptability may be at risk of disinterest and disengagement. In addition, in a study using the Career Satisfaction Scale, Spurk et al (2011) found that individuals who initially reported high career satisfaction showed a steeper decline in satisfaction over time.

Career Futures Inventory

The Career Futures Inventory (CFI) is a validated, 25-item measure of employee positive career planning attitudes (Rottinghaus et al. 2005). It has three subscales relating to career adaptability, career optimism and perceived knowledge.

Career Futures Inventory – Revised

The CFI-Revised is a 28-item validated version of the CFI with five subscales: career agency, occupational awareness, support, work-life balance and negative career outlook. Changes from the original CFI include a measure of career agency and measures of relational components.

Career Futures Inventory – Short Form

The short form of the CFI was developed in Australia (McIlveen et al. 2013) with nine items to assess graduate employability going into the workplace as a latent indicator of their work performance. It has psychometric properties equivalent to the original CFI. The authors argue that the CFI- short form can be used as a measure of engagement with career and study. Those who score low on the measures of career optimism and adaptability may be at risk of disinterest and disengagement from their career (McIlveen et al. 2013).

The Career Satisfaction Scale (CSS)

The Career Satisfaction Scale (CSS) (Greenhaus et al. 1990) is a validated instrument that assesses change over time in relation to career satisfaction, a factor that is related to work behaviour and wellbeing (Spurk et al. 2011). The CSS includes five items that ask participants about their satisfaction with career success, progress, income, advancement, and new skill development.

Professional Commitment Scale

Meyer et al (1993) tested both the organisational and occupational commitment of nurses using the Professional Commitment Scale, an 18-item indicator with three main subscales, affective commitment, continuance commitment and normative commitment. Higher scores represent higher commitment.

3.3.2.5 Productivity at work and work performance

We found two scales that measure the impact of mental health on work productivity and work performance. They focus on how mental health or health in general may interfere with the ability to perform job roles (Lerner et al. 2001).

Work Limitations Questionnaire (WLQ)

The WLQ is a validated, 25-item indicator of the degree to which health conditions and limitations interfere with specific components of job performance and their impact on productivity. Lerner et al (2001) piloted the instrument with clinic patients matched with employed workers, and found that the WLQ was a reliable self-report measure of the degree to which chronic health problems interfere with the ability to perform job roles.

Work Limitations Questionnaire (WLQ-SF)

The WLQ-SF is a validated 8-item measure (Walker et al. 2017) of the degree to which university employees were experiencing limitations on-the-job due to their health problems, and health-related productivity loss

(presenteeism). Respondents rate their level of difficulty or ability to perform specific job demands. The eight-item scale showed validity and reliability and is a viable alternative to the 25-item scale (Walker et al. 2017).

3.3.2.6   Psychosocial hazards

Psychosocial hazards in the workplace are those work-related factors that affect an employee's response to work and work conditions, resulting in work-related stress and potentially causing psychological health problems and injuries (International Association for Public Participation n.d.) . We found four instruments related to psychosocial hazards in the workplace. Two were validated scales relating to job quality and security and one assessed psychosocial hazards in an individual's workplace. The remaining scale focused on incivility in the workplace. These measures appear to focus on specific psychosocial hazards – rather than on a broad assessment of psychosocial hazards. There are other relevant instruments for example, the People at Work survey, a risk assessment survey tool that identifies 13 psychosocial hazards (seven relate to 'Job Demands' and six to 'Job Resources'). This research was recently translated into a self-assessment tool available online.

Psychosocial Job Quality Measure (PJQM)

The PJQM was derived from the HILDA survey, which includes twelve items that assess different psychological characteristics of work. The HILDA items had not been psychometrically assessed or validated. The study by Leach et al (2010) established that the HILDA items reflect three items of psychosocial job adversity: job demands and complexity, job control and job security. The PJQM can be used to follow the relationship between job adversity and physical and mental health (Leach et al. 2010).

Job Insecurity Scale (JIS)

The JIS is a four-item validated scale of job insecurity, initially developed from data across five European countries. Vander Elst et al (2014) found it was valid and reliable and could be used to make meaningful comparisons across countries and assess how job insecurity relates to outcomes.

Psychosocial Hazards Investigation Report for individuals

The Psychosocial Hazards Investigation Report (Government of Western Australia n.d), is part of a toolkit aimed at psychologically safe and healthy workplaces and as such, is not a validated instrument. Its aim is to respond to a psychological injury, assess the reasons for its occurrence and what corrective actions have been taken. The main aim of the tool is to help manage psychosocial hazards in the workplace and their impact on workers.

Workplace Incivility Scale

Impolite behaviours and disregard for others in the workplace – known as 'workplace incivility' – can act as a precursor to more extreme forms of antisocial behaviour and therefore should be taken seriously by employers (Keçeci & Turgut 2018). Research suggests that incivility is pervasive and leads to time lost by managers as well as lowering the wellbeing of employees and impairing their ability to relax and detach from the workplace after work. The Workplace Incivility Scale has two sub-scales (co-worker incivility, 12 items; supervisor incivility, 16 items) and was developed and validated in Turkey. When aggregated, it can be considered a measure of organisational culture and experience of work. Scores may be used to prompt action by leaders in order to prevent a potentially damaging 'incivility spiral' among employees.

3.3.2.7   Stress

The effort reward imbalance model proposes that where work effort is greater than reward, work-stress results and may lead to adverse health outcomes (Siegrist et al. 2004). Chronic psychosocial stress at work is a modifiable risk factor for depression (Siegrist 2008). In addition, over commitment increases the risk of adverse outcomes (Siegrist et al. 2004).

Business Stress Test

This is an online tool that allows business owners to do a quick assessment of their stress. It has been developed for Australian small business owners and includes 13 questions about typical business stressors (Ahead for Business 2022a). After the participant completes the survey, tips and tools are suggested, depending on individuals' responses.

The Effort-Reward Imbalance scale/questionnaire (ERI)

The ERI is a validated self-report measure of effort reward imbalance and has a long (22 items) and a short form (16 items) (Stanhope 2017). The ERI has been used with white collar workers and blue-collar workers and has been used in a number of large scale studies involving emergency workers, medical workers and education workers (Stanhope 2017). It is recommended for investigating links between occupational stress and health conditions (Stanhope 2017).

3.3.2.8 Bullying

The Fair Work Ombudsman states that everyone has a right to a workplace free of bullying. Workplace bullying can be defined as exposure to repeated and systematic negative behaviour and those who are severely targeted often report social isolation (Notelaers et al. 2019). Workplace bullying is a major social stressor at work due to its severe negative consequences for employee health and wellbeing (León-Pérez et al. 2019). We found one tool related to workplace bullying.

The Short Negative Acts Questionnaire (SNAQ)

The SNAQ is a revision of the Negative Acts Questionnaire-Revised and in a study of Belgian organisations by Notelaers et al. (2019) found that both occasionally bullied and severe targets groups experienced deteriorating health, more sickness absenteeism and lower job satisfaction compared to other groups. The tool was able to differentiate between those who were severe targets of bullying, occasionally bullied, infrequently criticised about their work and not bullied or criticised (Notelaers et al. 2019). There appear to be several versions of this tool from nine to 29 items.

3.3.2.9 Burnout

Workplace burnout, though not considered a mental illness, negatively impacts employees' health and performance and is also preventable (Brown & Quick 2013). It is a condition that is specifically related to the workplace with the World Health Organization (WHO) classifying workplace burnout as an occupational phenomenon that arises from chronic workplace stress that has not been effectively managed (World Health Organization 2022). The impact of the pandemic has seen workers in particular industries, such as healthcare, increasingly prone to burnout. We found two tools related to the measurement of workplace burnout. We also found one tool, the Utrecht Work Engagement Scale (UWES), that measures the 'opposite of burnout', i.e. workplace engagement. This tool may be used to measure burnout in reverse such that lower scores relate to higher likelihood of burnout. Other employee engagement instruments are available for example, the Intellectual, Social, Affective (ISA) Engagement Scale (Rana & Ardichvili 2015) operationalises a model of engagement that has three requirements: a work-role focus, activation and positive effect (Soane et al. 2012).

Maslach Burnout Inventory (MBI)

The MBI is a 22 item scale of occupational exhaustion, depersonalisation and loss of empathy and personal accomplishment assessment (Schaufeli et al. 2001). Burnout risk is high where occupational exhaustion and depersonalisation is high and personal accomplishment is low. The tool was developed to assess burnout in individuals who work with people (i.e. the human services and medical professionals) but is described as 'context-free' and able to be used for individual diagnostic and/or screening purposes (Schaufeli et al. 2001).

Utrecht Work Engagement Scale -9 (UWES)

The UWES is a short questionnaire to measure work engagement – a positive work-related state of fulfilment characterised by vigour, dedication and absorption (Schaufeli et al. 2006). The original UWES contained 24

items but was shortened to 17 items and then again to 9 items (Schaufeli et al. 2006). It measures engagement through vigour, dedication, absorption and professional efficacy, the opposite of burnout. Using a large international database, the UWES-9 was developed and validated to measure work engagement and was found to be negatively associated with burnout (Schaufeli et al. 2006).

Occupational Fatigue Exhaustion Recovery Scale (OFER15)

The OFER15 is a 15 item measure of work-related fatigue, developed and validated across three study populations (Winwood et al. 2005). A unique aspect of the tool is that it measures inter-shift recovery, end-of-shift fatigue states and maladaptive persistent fatigue traits as an overall measure of recovery from fatigue (Winwood et al. 2005). The study by Winwood et al (2005) also showed it is valid and free from gender bias.

3.3.2.10 Return to work (RTW)

As part of the Recovery Through Work measurement framework, the State Insurance Regulatory Authority (SIRA) developed a set of metrics, measures and indicators that could be used to track the recovery and return to work of people who have been injured in the workplace or on the roads (State Insurance Regulatory Authority 2021). They were developed to utilise various data sources such as administrative data, claims data, audits, surveys and evidence reviews. Many of these measures and indicators are relevant to the individual as they return to work (State Insurance Regulatory Authority 2021), refer to Table 12.

Table 12   Individual-level SIRA indicators, specific to Return to Work (RTW) following injury

Indicator	Explanation and data source
Aligned expectations	Setting positive recovery expectations that are aligned with everyone throughout the process leads to better chance of return to work (RTW). From SIRA (IPS) and SWA survey.
Biopsychosocial approach	Tailored, person-centric claims management using a biopsychosocial approach to understand the worker, their circumstances, goals, barriers and strengths (interconnection between biological, psychological and socio-environmental factors).
Clinical framework application	Allied health practitioners use a biopsychosocial approach, set goals relating to function, participation and RTW, and empower the worker to manage their own injury. From SWA survey and SIRA injured person survey.
Concern about making a claim	Concern about making a claim is associated with a negative influence on RTW outcomes. SWA survey every two years.
Contact between employer and treatment provider	RTW is improved by contact between healthcare provider and the workplace. From SIRA injured worker survey, insurer file review and employer survey.
Encourage evidence-based views of recovery	Treatment providers are well placed to educate workers that recovery at work is in their best interest. From SWA biannual survey or SIRA injured person survey.
Evidence-based medical utilisation	To be developed. Higher medical intervention associated with negative influence on RTW. From claim data.
Expectations of recovery	Workers with stronger expectations of recovery at work following injury are associated with better RTW outcomes. SIRA employer survey.
Informing Workers	Ensuring workers understand their rights and responsibilities. From SIRA survey and assessed by inspectors during site visit.
Lawyer utilisation	Lawyer involvement is associated with less positive RTW outcomes. Claim data.
Pain behaviour	For future consideration. Workers describing pain experience in exaggerated terms (pain catastrophising) or who avoid pain related situations (fear avoidance) have worse RTW outcomes. SIRA survey data.
Perceived injustice	Procedural, informational and interpersonal justice. Experience of the claims process. From SIRA survey.

Indicator	Explanation and data source
Perceived workability	Workers who perceive their ability to function in the workplace as lower are associated with less positive RTW outcomes. From SWA survey every two years. Additional source: SIRA injured person survey.
Positive experience with the insurer	The quality of a worker's interactions with the insurer influences RTW outcomes. From SIRA survey data.
Recovery Expectations	For future consideration. Workers with stronger expectations of recovery have better RTW outcomes. From SIRA survey data.
RTW focused treatment	Treatment with RTW focus improves RTW outcomes. From SIRA injured person survey.
Self-efficacy	For future consideration. Workers with higher self-efficacy – a greater belief in their ability to achieve goals – are likely to have better RTW outcomes. SIRA survey data.
Stakeholder collaboration	RTW outcomes improve when the RTW process is planned, and the actions of all parties are coordinated. Interventions coordinated across at least two domains (personal, workplace, insurance and compensation, and healthcare) reduce time away from work following injury. From SIRA injured person survey, employer survey, insurer file review.
Worker empowerment	The worker having ownership of RTW goals and outcomes. SIRA injured person survey.

Discussion Point

Issue 3 – Available instruments

Q6:   Are any relevant instruments with a particular focus on mentally healthy workplaces missing from our desktop review (Sections 3.2 and 3.3)?

3.4   Non-workplace-specific instruments

The desktop review identified 23 instruments that are administered to and completed by individuals about their own states of general mental health and wellbeing. Despite the fact that these were not designed specifically for workplaces, they have often been used in organisational settings and are therefore included here. Most are standardised, well-validated psychometric measures of psychosocial constructs and therefore fit the definition of 'indicators' (refer to Glossary) although not necessarily of workplace mental health.

We have grouped these into three categories of instruments based on what they aim to measure: positive or negative psychological constructs or physical health. There were five instruments for positive psychological constructs (including wellbeing, life satisfaction, resilience/coping, quality of life and social support) and five for negative psychological constructs (broader mental-ill health, depression/anxiety, psychological distress, post-traumatic stress disorder and alcohol abuse/addiction). Physical health only had one instrument identified, which was designed for measuring insomnia.

3.4.1   Positive psychological constructs

Wellbeing

We identified three validated instruments that have been used to measure workplace wellbeing. These included the Personal Wellbeing Index (PWI), also known the Australian Unity Wellbeing Index (Cummins et al. 2003; International Wellbeing Group 2013), The World Health Organisation – Five Wellbeing Index (WHO-5) (The World Health Organization 1998) and the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Tennant et al. 2007).

While their conceptualisations of wellbeing differ slightly, they are all positively worded and draw on a 'positive only' conceptualisation of individual subjective wellbeing. This is important, particularly for indicators of the 'promote' pillar as it removes any potential for a ceiling effect (Tennant et al. 2007).

All of these scales are backed by a number of peer-reviewed studies, validating their suitability as tools for measuring wellbeing (International Wellbeing Group 2013; Tennant et al. 2007; Topp et al. 2015). They also provide significant amounts of normative data, thus enhancing their appeal for inclusion in a monitoring framework. The PWI, in particular, has been used for over 20 years in 37 nationally representative surveys with more than 65,000 Australian adults (International Wellbeing Group 2013). Practically speaking, all of these instruments use a small number of items (WEMWBS: 14 items, WHO-5: 5 items, PWI: 7 items) and have been used in various contexts.

Life satisfaction

There was one instrument identified to measure satisfaction with life, namely the Satisfaction with Life Scale (SWLS) (Pavot & Diener 2008). It has been found that five elements make up an individual's level of life satisfaction including career status, social status, financial status, physical health and community support (Pronk et al. 2016). As life satisfaction is such a broad construct made up of a number of interacting factors, it would not be ideal to use this instrument solely as an indicator of a mentally healthy workplace.

Resilience and coping

There were three instruments identified that measure the constructs of resilience and/or coping. These included the Connor Davidson Resilience Scale (CD-RISC) (Connor & Davidson 2003), the Coping Orientation to Problems Experienced Inventory (Brief-COPE) (Abdul Rahman et al. 2021) and the Brief Resilience Scale (BRS) (Smith et al. 2008). All of these instruments have been validated and used within workplace mental health research. For example, the CD-RISC has been used to measure resilience and its relationship to better mental health amongst executive employees (Kermott et al. 2019) and to examine resilience amongst US veterans (Green et al. 2014). The Brief COPE has been validated amongst a sample of nurses (Abdul Rahman et al. 2021) and the BRS has been used in studies assessing nurses' resilience to patient violence (Hollywood & Phillips 2020). While resilience and coping are crucial at an individual level for a person to have the ability to bounce back from adversity, these instruments are not considered effective in measuring workplace resilience at an organisational level or specific constructs that create a resilient organisation.

Quality of life (QoL)

There were two instruments identified that aim to measure indicators related to quality of life (QoL). The 36 item Short Form Survey (SF-36) as well as brief versions of this instrument were identified (Jenkinson et al. 1993; Ware Jr et al. 1996).The SF-36 is a well-validated instrument that is often used in research exploring health outcomes and includes a number of health related domains (physical functioning, physical role, pain, general health, vitality, social function, emotional role, mental health). The other instrument identified in the QoL construct was the World Health Organization's Quality of Life Abbreviated Version (WHOQOL-BREF) (Skevington et al. 2004), which is also a well-validated instrument that aims to assess QoL within the context of an individual's culture, value systems, personal goals, standards and concerns. QoL is a broad construct with a number of conceptualisations. Thus, although scores could be aggregated across an organisation, they are likely to be influenced by many factors outside the organisation's control, and therefore would not provide a clear picture of how mentally healthy an organisation is overall.

Social support

The two-way Social Support Scale (Shakespeare-Finch & Obst 2011) is a validated instrument that measures four dimensions: giving emotional support, giving instrumental support, receiving emotional support and receiving instrumental support. This has been used previously in workplace mental health research, for example it was used in a study exploring the role of social support within the workplace on burnout, emotional labour and job satisfaction (Kinman et al. 2011). While social support within the workplace

contributes to culture and experiences of work, measuring this at an organisational level (such as organisational social supports in place within the workplace) would be a more appropriate indicator for the purposes of the NWI.

3.4.2 Negative psychological constructs

Mental-ill health

We identified one instrument that measured the construct of mental-ill health overall, the Mental Health Screening Form III (MHSF-III) (Carroll & McGinley 2001). This was designed as a basic screening tool for people seeking admission to substance abuse treatment programs and therefore includes items questioning hallucinations, impulsivity, hospital psychiatric admissions, eating disorders and paranoia. As this instrument is most commonly used as a screening tool for comorbid mental health disorders in individuals with substance abuse disorders, its relevance and practicality to measuring a mentally healthy workplace is limited.

Depression and anxiety

In total there were five instruments identified that measure the constructs of depression and anxiety. For measuring anxiety at an individual level, the State-Trait Anxiety Inventory (STAI) (Spielberger 1983) and The Generalized Anxiety Disorder (GAD) Scale-7 (Spitzer et al. 2006) were identified. These are well-validated instruments that are used to measure anxiety symptoms. They have been previously used in workplace mental health research, for example the STAI was used to measure anxiety in a study involving healthcare workers (Turnipseed 1998) as well as a study involving US Marshalls (Newman & Rucker-Reed 2004). However, they are usually administered by a trained clinician or researcher.

For measuring depression at an individual level, the Beck Depression Inventory (BDI) (Beck et al. 1987), the Patient Health Questionnaire (PHQ-9) (Löwe et al. 2004) and the Depression, Anxiety and Stress Scale (DASS) (Lovibond & Lovibond 1995) were all identified in the search. These are all well-validated instruments that have been used across a number of different populations both clinically and in research. However, similar to the anxiety instruments, they were designed for diagnostic purposes (that is, to identify clinically significant levels of the constructs). It is also recommended these instruments are administered by clinicians or trained researchers rather provided to individual employees for self-assessment.

Psychological distress

There were two instruments (a short and brief version of the same) identified that measure the construct of psychological distress by asking questions about the experience of different emotional states. The Kessler-10 (K10) (Brooks et al. 2006) is a well-validated instrument for 'quick testing' of psychological distress, with a shorter six-item version also available (K6) (Jong Won & Sun Hae 2015). It can either be administered by a clinician or self-administered. These instruments have been used previously in workplace mental health research, for example to measure the prevalence of psychological distress amongst a group of public and private sector employees in Japan (Fushimi et al. 2012).

Post-traumatic stress disorder (PTSD)

There were two instruments identified that measure PTSD symptoms: the Impact of Events Scale (IES-6) (Weiss 2007), which was developed to measure subject distress caused by traumatic events, and the PCL-5 that aims to assess the 20 DSM-5 symptoms of PTSD (Weathers et al. 2013). These instruments are well-validated and have been used previously within workplace mental health research to screen for PTSD (Rodrigues et al. 2021). While these instruments may be useful for measuring PTSD related to high stress industries such as emergency workers, they were initially designed as a therapeutic instrument for medical diagnosis and therefore should be administered under the supervision of clinicians.

Alcohol abuse/addiction

One instrument measured alcohol consumption: the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al. 1993). The AUDIT was developed by the World Health Organization (WHO) as a method for

screening for excessive drinking. In a workplace context this instrument may be relevant to identifying 'drinking culture' within a workplace, potential effects of stress or exploring relationships between absenteeism, burnout and alcohol use .While tools like AUDIT can be used in population screening to estimate prevalence of alcohol use, they are better suited to clinical settings to assess change in symptoms. There are privacy implications in using these types of instruments in a workplace setting as they generate sensitive health information and may identify risks that require specialised knowledge to interpret and act on, which makes them unsuitable for workplace use.

3.4.3   Physical health

Insomnia

The Insomnia Severity Index (ISI) (Bastien et al. 2001) was the only instrument identified under the category of physical health, although the SF-36, a health-related quality of life measure, does have subscales for physical functioning, pain, vitality and general health. Insomnia severity has been explored extensively in workplace mental health research (Vega-Escaño et al. 2020). While physical health is a crucial component to a person's work ability, it does not necessarily indicate the mental health and wellbeing of an organisation.

3.5   Summary of findings

Twenty-seven available Australian datasets were identified in the desktop review. At first glance, the most promising for the NWI monitoring framework and current baseline state would be those that (1) have the greatest coverage of relevant indicators, measures and metrics, and (2) have been collected recently. On this basis, the following could be considered among the contenders:

- The SuperFriend Indicators of a Thriving Workplace Survey;

- The Benchmarking Tool used to evaluate the NSW Mentally Healthy Workplaces Strategy;

- The regularly collected ABS data on workplace injuries, including psychological injuries;

- The Safe Work Australia National dataset for compensation-based statistics;

- People Matter Employee Survey, NSW Public Sector Commission;

- Employee Census, Australian Public Service.

Some of these datasets cover only selected employment sectors (e.g., public servants) but offer relatively large, regularly updated datasets. To this list should be added the ongoing work resulting from the Australian Workplace Barometer project (i.e., data collections using the Psychological Safety Climate tool (PSC-12)) and the People at Work Survey. Both may have more recent data available than is apparent from the information we were able to obtain within the timeframe for this review, and we will follow up to obtain further details. In addition, more information will be sought about Victoria's Leading the Way - Mental Health and Wellbeing: the minimum dataset. A description of the survey instruments used for these 'contenders' (and other data collections in the long list) has been included in Section 3.2 to aid in evaluating their potential. As discussed later in this report, other criteria need to be taken into account in the final selection of datasets for the monitoring framework and baseline, including issues around data quality, completeness and access.

We also assembled information about instruments that are used to measure workplace mental health and wellbeing and therefore could be used in the ongoing monitoring of the NWI. The distinction between surveys and instruments is somewhat arbitrary and these categories overlap. Ultimately, they were categorised based on their purpose. Surveys were seen as means of taking a snapshot of the status of workplace mental health across a nation, state or industry, either once or at regular intervals. Instruments, particularly organisation level instruments, were seen as a means by which organisations could self-assess psychosocial risks or collect other relevant data to inform WHS risk management and quality improvement. In practice, instruments are included in surveys, as shown in the tables accompanying the text. Several of the organisation-level

instruments described in this chapter can be used either way, to collect snapshot data or establish benchmarks, and to guide action within organisations. This enhances their potential for use in the NWI monitoring framework.

Unlike the datasets, the selection of instruments does not have to be restricted to Australian resources. There are several promising international examples, including the What Works Wellbeing employee snapshot survey (What Works Centre for Wellbeing 2020), the HSE Management Standards Indicator Tool (Health and Safety Executive n.d), and a questionnaire developed by Workplace Strategies for Mental Health in Canada to assist organisations to assess themselves against the Canadian Standard. The latter has already influenced several of the tools and approaches developed in Australia.

There is a huge variety of individual-level, workplace-specific instruments available to assess workplace mental health and wellbeing at the level of individual employees, and (if required) these could be included in purpose-built organisation-level instruments (e.g., for self-assessment and, if there is sufficient interest, to feed into minimum datasets for national monitoring) or questionnaires for large-scale surveys (for regular or snapshot overviews of the status of mentally healthy workplaces and to measure progress towards the objectives of the NWI). However, it may not be necessary to create new approaches to measurement, as the desktop review has uncovered a considerable amount of work on organisation-level instruments which has already taken place in Australia. It may be possible to build on these earlier efforts, depending on the appetite for sharing information and resources. In particular, several statutory authorities have developed risk assessment tools and accompanying resources, and collaborative research has led to the creation of the Australian Workplace Barometer and the People at Work Survey, as mentioned above.

Finally, the desktop review also identified a very large number of instruments that were not designed for a workplace but measure positive and negative psychological constructs that may be experienced by people at work at an individual level. All of these instruments have been previously used in a workplace setting, however predominantly for clinical or research purposes. There was a preference for instruments measuring the constructs of depression and anxiety at an individual level, as well as wellbeing and resilience/coping.

The instruments that measure positive psychological constructs have all been well validated and used across a number of workplaces for research purposes. The constructs identified (wellbeing, life satisfaction, resilience/coping, quality of life and social support) are all important constructs to consider when measuring a mentally healthy workplace. However, as these positive constructs are being measured at an individual person level, it can be difficult to see how an organisation is performing in terms of creating a positive psychosocial climate for their people, contributing towards a mentally healthy workplace. Therefore, they would need to be complemented by questions about the person's employer (organisation).

The instruments that measure negative psychological constructs are usually used for diagnostic purposes within a clinical environment or for research purposes by trained scientists/researchers. Therefore, while they are useful in diagnosing individual mental health conditions of people, their use in measuring a mentally healthy workplace at an organisational level would be limited. There would also remain the issue that the leadership/ management administering these types of instruments would potentially feel obligated to 'do' something (such as arrange therapy) for people, which would not be practical from an organisational perspective, nor would every organisation have the capacity to do so.

Our plan is to engage stakeholders in discussions around the findings of the desktop review and to agree on criteria for evaluating the datasets and instruments described in this chapter. The following chapter presents information on quality checks conducted to ensure that the desktop review comprehensively covers the field of mentally healthy workplaces and has captured information on the instruments most commonly used in research to measure this construct.

4 Selecting indicators and datasets

The previous chapter outlined the desktop review findings and provided an overview of available Australian datasets, workplace-specific and non-workplace-specific instruments and potential domains and indicators. These findings will inform the content of the NWI National Monitoring Framework.

An anticipated outcome of this discussion paper is an agreed set of criteria for short-listing datasets and indicators identified in the desktop review as part of the process of refinement which will result in the baseline report and final indicators. While the criteria for datasets differ from those proposed for indicators, measures and metrics, the primary requirement for both is alignment with the strategic directions of the NWI.

In this chapter we first discuss common criteria which have previously been used to judge the value of datasets and data collection methods. (Note that the criterion of 'relevance' is discussed further in the following chapter.) This is followed by a presentation of the suggested method for shortlisting to be used to identify indicators, datasets and data collection methods for the NWI National Monitoring Framework.

4.1 Potential criteria for shortlisting and inclusion

4.1.1 Relevance

The term 'mentally healthy workplace broadly' describes workplace experiences that protect, respond to and promote mental health (National Mental Health Commission 2022). The Blueprint provides the strategic anchor and the draft Theory of Change (National Mental Health Commission 2021) suggests some potentially relevant domains to measure, as do the NWI measurement guides (O'Neill et al. 2022). The goal is to draw on all these resources to produce a Framework which can capture relevant constructs, domains and possible sub-domains in order to track population level trends and identify whether workplaces are becoming more mentally healthy and where there are additional areas for focus or strategic action. Therefore, a combination of leading and lagging indicators is desirable.

The ultimate outcome for measurement and reporting is to achieve positive change in mental health and wellbeing for all employees within an organisation, enabling staff to lead a contributing life and to be part of a thriving community (Ernst & Young 2020a). Action or intervention can occur at the individual, team, organisational, industry or system level, and thus a national Framework must monitor change at various scales: micro, meso and macro.

A suggested approach to structuring the Framework around relevant domains and sub-domains is presented in the following chapter. At this point in the discussion paper, we are simply flagging that relevance is a key criterion for consideration when selecting indicators and datasets.

4.1.2 Psychometric validity

In addition to the coverage of relevant domains, another important consideration for the critical review of findings is establishing the quality of available measures according to psychometric criteria (validity, reliability, sensitivity to change) to ensure that measures are credible and can be used longitudinally. This is consistent with the NWI measurement guides which suggest that high quality data has three main characteristics:

- Relevance – Is it directly useful for informing decisions?

- Reliability – can it be trusted, is it accurate and unbiased?

- Validity – is it clear what the data has actually measured and what it means? (O'Neill et al. 2022).

4.1.3 Interpretability

Another important consideration is whether scores are meaningful and can be interpreted easily. This can be enhanced by availability of data to establish population norms. As the intent of the monitoring framework is

to establish a current baseline state and to allow future monitoring, consideration is needed as to the comparability of measures and metrics across industries and organisations of different sizes. National normative data can be used to assist organisations in interpreting their own performance data against that of similar organisations. It can also be used to strengthen the validity and relevance of national monitoring by allowing comparison of the outcomes for particular industries and types of organisations (sole trader and small business, medium to large organisations etc.) against the outcomes of a general population of a country or region. In this way, unexplained differences can be identified and quality improvement efforts can be targeted more effectively.

4.1.4   Pragmatic considerations

It is also important to consider the usefulness of instruments, measures and metrics in terms of cultural and geographic suitability. Theoretical frameworks for evaluating and prioritising measures assist in this process. There are various theories around the selection and use of health and social outcome measures. For example, Glasgow and Riley (2013) outlined a set of required and recommended criteria for 'pragmatic measures' for use in 'real-world settings' where the goal is to translate research into practice and to measure intervention effects. The essential criteria for a pragmatic measure are:

- Important to stakeholders;

- Low burden (i.e., not time consuming or expensive);

- Sensitive to change;

- Actionable; adapted from (Glasgow & Riley 2013).

To these criteria can be added accessibility, as the instruments that are ultimately recommended need to be freely available. In deciding for or against an indicator one should also consider crucial issues about data access such as the regularity of collection, timeliness of collection and availability of related data.

4.1.5   Other potential criteria

The Safe Work Australia National Return to Work Strategy 2020-2030: Methodology for the Measurement Framework (Safe Work Australia 2019) includes principles for selecting the broader measurement suite which are highly applicable to the NWI Monitoring Framework. When considering the final selection of indicators, measures and metrics and supporting datasets, the authors of the Safe Work Australia (2019) framework applied the following criteria:

- **Holistic:** The suite of measures should cover multiple components of the measurement model. That is, they should include a mix of leading and lagging indicators; pre-injury, post-injury and outcomes indicators, and indicators across the four domains.

- **Focused:** There should not be an extensive list of measures. Having too many measures makes it difficult to focus attention on the most important areas for improvement. Having too few runs the risk of missing important changes in performance.

- **Mixed Sources:** Measures should be derived from a mix of data sources to provide multiple perspectives on performance. This can include both quantitative and qualitative data collected from workers, employers, insurers, and others involved in the Australian return to work processes.

- **Effort-Reward:** The effort involved in collating, analysing and reporting on data should be minimised where possible. This means that data should already be collected, or able to be collected, on a regular basis for the majority of measures. Collecting additional data from new sources may be warranted if they provide novel information not otherwise available.

4.2   Suggested shortlisting method for NWI Framework

In summary, the indicators, measures and metrics selected for the NWI national monitoring framework should be relevant and suitable for guiding action at an organisation, industry or system level. They should be derived from existing datasets or data linkage projects or implemented in ways that minimise burden of collection. They should also be capable of demonstrating trends, with a wide range of negative and positive states to reduce the impact of ceiling or floor effects.

In addition, it should be noted that almost all (more than 97%) Australian businesses are sole traders or are small businesses with less than 20 employees. A further 2% of businesses are medium-sized organisations with 20 to 199 employees and less than 1% have more than 200 employees[3]. When considering the distribution of the Australian workforce by business size, these numbers are less extreme with 42% of people either work as sole traders or are employed by a small business. Twenty-four percent of people work for medium-sized organisations and 34% for large organisations[4]. The distribution of Australian businesses by size is relevant for the selection data sources and instruments because to ensure their representativeness and applicability to the many sole traders and small businesses and the people associated with them.

A truism attributed to Albert Einstein is that 'Not everything that can be counted counts and not everything that counts can be counted'. Toye (2015) highlights the importance of looking beyond quantitative data if we are to gain a true understanding of peoples' experience of mentally healthy workplaces. Qualitative data is not routinely included in national monitoring frameworks; however it is not uncommon to integrate evaluation activities that support supplementary collections at various intervals. This may provide an opportunity to collect qualitative data to strengthen the understanding of quantitative results or explore the experience of particular groups.

The criteria provided in Table 13 present a starting point; further refinement is needed. These were drawn from reviewing the approach undertaken by Safe Work Australia, the context of the measurement guides developed for the NWI by the UNSW and the work of Glasgow & Riley (2013) relating to pragmatic measures. We have cross-checked our proposed short-listing criteria against the criteria for indicator selection used by other Australian organisations as outlined in Appendix 6.

Table 13   Criteria to short-list desktop review findings

Criterion name	Criterion definition	Glasgow and Riley (2013)	Safe Work Australia (2019)	Questions	Use for instrument selection	Use for dataset selection
Relevant/ Important	Addresses the priorities of stakeholders; consistent with the National Blueprint	Yes - essential	Yes	Is the measure relevant and acceptable to a variety of stakeholders? Has there been consultation?	Yes	Yes

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[3] https://www.abs.gov.au/statistics/economy/business-indicators/counts-australian-businesses-including-entries-and-exits/latest-release
[4] https://www.abs.gov.au/statistics/industry/industry-overview/australian-industry/latest-release

Criterion name	Criterion definition	Glasgow and Riley (2013)	Safe Work Australia (2019)	Questions	Use for instrument selection	Use for dataset selection
Actionable	Informative, can be used to shape policy and/or behaviour to improve outcomes Lead to action (at various population levels e.g. individual, organisation, industry)	Yes - essential	Yes	Does the measure help capture indicators of evidence-based practice or outcomes of evidence-based interventions? Can the measure be influenced by the actions described in the Blueprint?	Yes	Maybe
Available data that is measurable	Existing data sources are available (e.g., routinely collected data)?	Yes	Yes	Is there publicly available data relating to this measure?	No	Yes
Feasible/ Timely	Data collection is available but if not already happening, but implementation is feasible; data collection does not place excessive cost or time burden on individuals or organisations	Yes - essential	Yes	Are there possible avenues for data collection, timely reporting and analysis? Is the measure brief and inexpensive?	Yes	N/A
Interpretable	Scores or results are easy to understand and can be compared with instrument guidelines, external standards or population normative data to assist in interpretation	Yes	Yes	Is it easy to understand what the data mean? Can they be compared with population norms, or interpreted in relation to a theory or model, or against an external standard?	Yes	Yes
Valid, reliable and sensitive to change over time	Measure can reliably capture change over time in response to the kinds of interventions likely to be implemented for the NWI	Yes - essential	Yes - as part of a criterion around psychometric soundness	Is the measure psychometrically sound (valid, reliable), well-defined, complete and timely? Could the measure be used longitudinally to track progress?	Yes	Yes

Criterion name	Criterion definition	Glasgow and Riley (2013)	Safe Work Australia (2019)	Questions	Use for instrument selection	Use for dataset selection
Unlikely to do harm	Measure will not create unintended consequences for individuals or organisations	Yes	No	Will the use of this measure to collect data create an obligation for employers or other organisations to act in response to particular scores? Is the indicator not liable to unpredictable or inexplicable fluctuations?	No	N/A
Applicable across population groups	The indicator is meaningful for the general population of Australian workplaces and for subgroups (industries and organisations of varying size)	Yes	No	Is the measurement subject to cohort effects?	Yes	Yes

Discussion Point

Issue 4 – Criteria for dataset and indicator selection

Q7: The draft criteria to support selection of datasets and indicators, measures and metrics are included in Section 4.2. Do you agree with these criteria in principle? Is there any way to simplify or prioritise these criteria? Are there additional criteria that should be considered?

5   Designing the monitoring framework

The purpose of this chapter is to discuss how a structure for the Framework might be developed in order to create a comprehensive and holistic approach to monitoring mentally healthy workplaces in Australia. The chapter leads to a number of discussion points. Through the consultation process we hope to draw on the expertise and opinions of stakeholders in relation to these issues. When agreement is reached on the overarching structure of the monitoring framework then the next step is an iterative one, moving between available datasets and the desired indicators, measures and metrics. The output of this decision-making process is likely to be a small suite of measures and metrics that provide the starting point to establish the current baseline state. This set will be progressively broadened as additional data sources become available either through specialty data collections, data linkage or other opportunities (Figure 2).

Figure 2   Iterative selection of datasets and indicators, measures and metrics
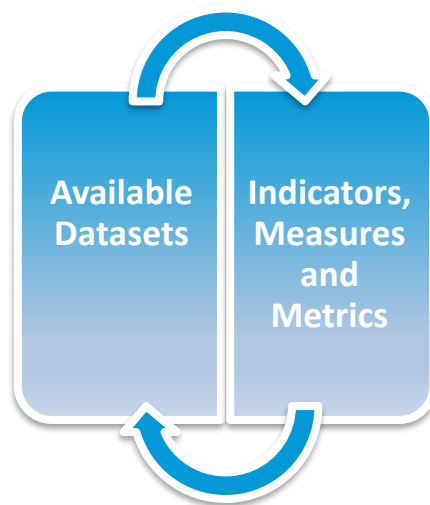
As a starting point, we have assumed that the structure of the Framework should incorporate the three **pillars** which are theorised to provide a foundation for mentally healthy workplaces, namely: protect, respond, and promote (Figure 1). The Framework will also need to incorporate indicators that link to the proposed **mechanisms of change** which apply at the levels of organisations (workplace or micro level), industries and sectors (external or meso level), and governments and regulatory bodies (national or macro level). As shown in Figure 3, action at each of these levels will be required in order to see improvements in mentally healthy workplaces (National Mental Health Commission 2022). These indicators may be organised around **sets of domains** at each of the **levels**. These issues are described below, followed by a discussion of principles which might be adopted to guide the structure and format.

Figure 3   NWI mechanisms of change (National Mental Health Commission 2022, p.19)
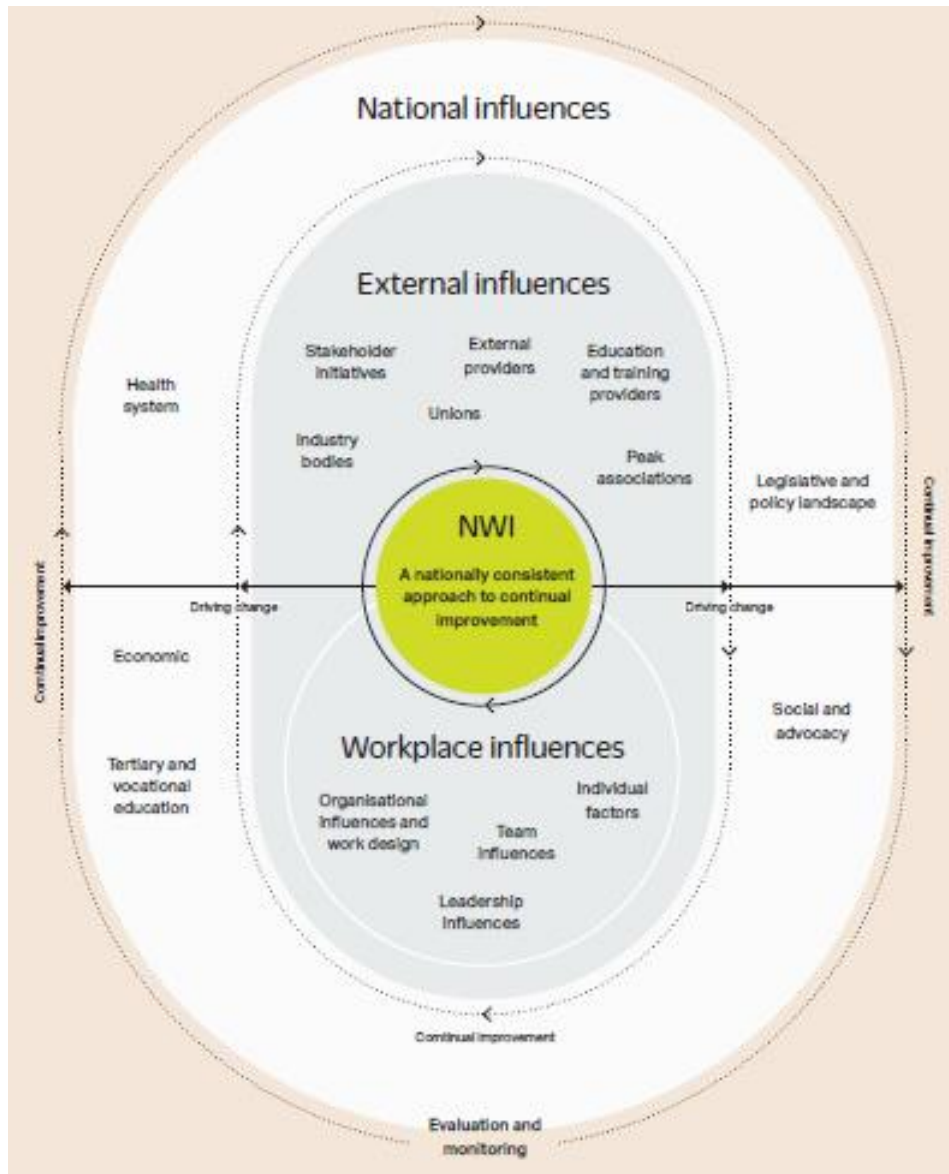
5.1   Mechanisms of change

The NWI Theory of Change (National Mental Health Commission 2021) identifies a variety of factors which may influence change across different levels of the system, from individual workplaces to industries and sectors to wider social and policy factors. At the micro (workplace) level, aspects of the organisation itself will influence outcomes, along with leadership factors and the resources that individuals bring to their workplaces. At the meso (external) level, industry-led actions and campaigns will affect outcomes, as will advocacy by unions and peak bodies, training requirements and availability, and other kinds of networks that link organisations within sectors. At the macro (national) level, both positive and negative impacts may occur through changes in policy, funding, regulation and legislation as well as broader social changes, research agendas, and support systems such as insurance, disability care and healthcare providers.

All levels of the system will require a continual improvement approach to create mentally healthy workplaces, and ideally the Framework will need to capture and document such improvements as they occur (or with as short a lag as possible) to inform and guide further change efforts.

5.1.1 Micro-level domains

In the long term, the NWI is expected to create change within organisations, with benefits for both organisations and individual employees. The proposed mechanisms of change at the organisational level are described in the NWI Theory of Change (National Mental Health Commission 2021). As shown in Figure 4 (National Mental Health Commission 2022, p.8), individuals are expected to benefit from change via improved personal resources and experience of work, while organisations benefit through better systems and job design leading to better performance. Individuals and organisations together create organisational culture, which may also change in response to the knowledge, skills and motivation provided through the NWI resources and online platform as well as the initiative's indirect effects on external supports, suppliers, and the broader policy and legislative environment. The NWI aims to build capacity within organisations to drive continuous improvement in workplace mental health and wellbeing practices and outcomes (National Mental Health Commission 2021).

Figure 4 Theorised processes and outcomes for mentally healthy workplaces at the micro level
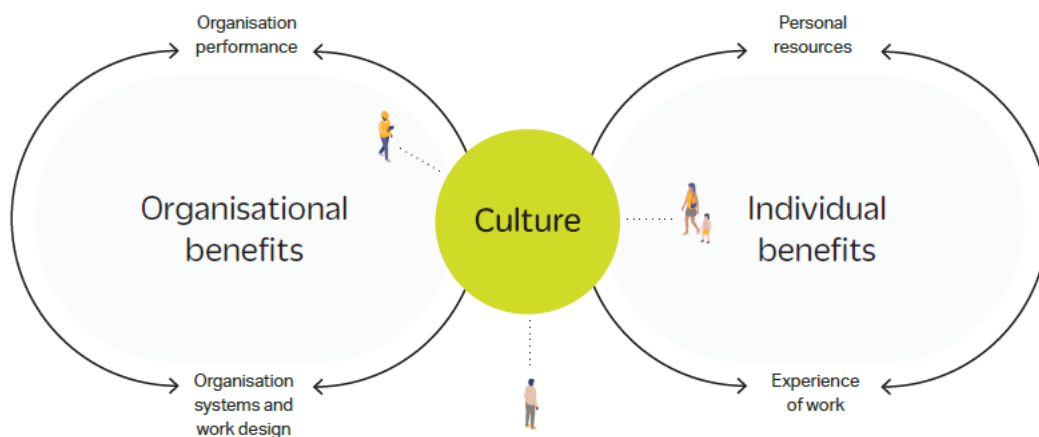
The proposed domains at the micro level were developed through careful deconstruction of the definitions of mentally healthy workplaces. These definitions are provided in the NWI Measurement and Reporting Guides (small business and sole traders, (National Workplace Initiative 2022a) and medium to large organisations (National Workplace Initiative 2022b) as well as the Blueprint for Mentally Healthy Workplaces (National Mental Health Commission 2022). The detailed descriptions found in the Blueprint for Mentally Healthy Workplaces are reproduced in Appendix 5. The process of deconstructing these definitions ultimately assisted with the identification of five key domains and sub-domains that span across each the NWI pillars and potentially apply at all three levels. These are shown in Table 14.

Table 14 Domains and sub-domains at the micro level

National Workforce Initiative Pillars		
Protect	**Respond**	**Promote**
Domains	**Sub-Domains**	
Communication	▪ Workers confident to raise concerns ▪ Leadership consult with workers in relation to mental health	▪ Help seeking is promoted ▪ Supportive conversations and relationships	▪ Positive relationships and meaningful connections within the workplace

National Workforce Initiative Pillars		
Protect	**Respond**	**Promote**
- Expectations and organisational goals are clearly communicated - Communication is civil and respectful		

	Protect	Respond	Promote
Culture	Processes to address bullying, harassment and violence are in place and implemented	Stigma relating to mental illness addressed	- Positive behaviour and achievements are rewarded - Culture is inclusive and includes diversity
Job design	- People have manageable workloads - People have adequate job control - People have adequate resources to perform their role	Tailored support for job positions	- People have the ability to co-design their positions - Employees are engaged in their work
Workplace design	- People are adequately trained and competent to do their jobs - The workplace is compliant with their processes	- Return to work and stay at work processes are in place - There are organisational processes to support people with mental illness at work (such as reasonable adjustments)	Opportunities for personal and professional development
Management	Leadership provide adequate supervision to their people	- Leaders are trained and capable in responding to mental illness in the workplace - Leader are motivated to address mental health concerns	- Leadership implement and promote wellbeing/wellness programs - The environment promotes learning, development and thriving

Within the organisational or micro level, the Framework will need to take into consideration the capacities of different-sized workplaces, from sole traders to medium-large businesses, possibly by incorporating indicators which apply only to larger organisations. It may also incorporate the concept of 'maturity' in a similar way. By incorporating additional indicators which apply only to medium-large businesses, or to organisations at a higher level of 'maturity', we aim to keep the structure relatively simple. The alternative would be to introduce another dimension to the Framework, which may introduce unnecessary complication. We welcome the thoughts of stakeholders on the issue of tailoring the Framework to organisational size and maturity while maintaining a straightforward, coherent set of indicators for national measurement.

5.1.2   Meso-level and macro-level domains

The NWI Theory of Change assumes that actions at the micro (workplace) level will translate into measurable impacts at higher levels and should therefore be evident from data aggregated across organisations. However, there may also be unique indicators of processes and outcomes occurring at higher levels that should be included in the Framework. Although this potentially complicates the structure of the Framework, it may be worth considering, given that the main audience of the monitoring framework will consist of government

policy makers, health service providers, academics, business and industry groups, unions and other organisations.

Further work may be required to classify the actions – and identify unique domains and sub-domains for measurement - at meso and macro levels if stakeholders feel this is a worthwhile exercise or essential to the development of the Framework. Potential domains that occur only at these higher levels (rather than being aggregated up from organisation-level data) could be identified from among the measures used in population or industry surveys (see Section 3.2). The Consultation Paper for the NWI Draft Theory of Change (National Mental Health Commission, 2021) offers a starting point by highlighting factors such as:

- Industry-led action to address specific factors relating to mentally healthy workplaces;
- Advocacy by unions and peak organisations;
- Training programs – curricula and available offerings;
- Business groups and advisory networks;
- Research agendas which, for example, identify specific industry-related factors and how these can be addressed, or clarify relationships between processes and outcomes at different levels;
- The impacts of support systems in health and disability care in responding to work-related mental ill-health;
- Insurance providers, particularly in relation to support for return to work and recovery at work;
- Regulation and enforcement of standards by regulatory bodies;
- National, State and Territory policy and legislation;
- The broader social system including social attitudes and values.

5.2   Format and structure of the monitoring framework

5.2.1   Guiding principles for design and development

In our view, gaining agreement on the principles guiding the development of the monitoring framework is important at this early stage as it provides a reference point for critical analysis as this work progresses. It may also be useful to develop a unique value proposition for the monitoring framework, as was done for the broader NWI. An integrated, cohesive value proposition, could commence by brainstorming as a group around three questions:

- Which stakeholders are being served?
- Which needs require outcomes?
- What costs will provide acceptable value?

The principles guiding design and development are drawn from the broader NWI project methodology and decision-making and include:

- Amplify not duplicate;
- Co-design and consultation;
- Create true value;
- Communicate purposefully;
- Make research-supported decisions;

- Design for the long term (National Mental Health Commission 2022).

These principles were discussed by the NWI and evaluation team members with regard to the monitoring framework and the importance of an evidence-based approach was emphasised. The principles were expanded to include:

- Make complexity simple;

- Refine thinking through collaboration and the feedback of others;

- Facilitate user-centred design from a policy audience perspective;

- Ensure there is validity and reliability behind the numbers;

- Learning from other relevant monitoring frameworks.

Discussion Point

Issue 5 – Structure of the monitoring framework **Q8:** We propose that the monitoring framework should monitor processes and outcomes at all levels, namely workplace (micro-level) factors, external (meso-level) influences and system or national/jurisdictional influences (macro-level). What is your view of this approach? **Q9:** Our desktop review has highlighted that there are many ways that indicators can be clustered or organised. We propose that the monitoring framework uses the NWI pillars (Protect - keep people psychologically safe at work; Respond - support people with mental health conditions; and Promote - build a positive workplace culture) and the domains we have derived from the NWI documentation (namely, communication, culture, job design, workplace design and leadership) as building blocks to align a mix of leading and lagging indicators. What is your view of this approach? Is there a need to identify unique domains at the meso and macro levels or is it preferable to maintain the suggested five-domain structure across the levels, for consistency?

Our thinking about the structure and format of the monitoring framework was informed by reviewing several purposively selected Australian examples of monitoring frameworks at national or state/territory levels (Appendix 7) which we examined for: guiding strategy, indicators, data collection, development, analysis and reporting, structure and components, and format.

Strategy: Most frameworks were based on a national overarching strategy or policy that provided the 'North Star' for the framework and several, provided a vision or overarching monitoring and reporting outcome. This could be expressed as a value proposition for the Australian people or what the monitoring framework aimed to achieve in the longer term. Several frameworks were designed to align with existing international reporting requirements, or to complement and reinforce other national or state and territory frameworks or policies.

The importance of a continuous improvement approach was explicitly mentioned in one framework and implicitly referred to in several others through emphasis on an ongoing process of refining indicators and investigating new data sources. The ongoing need to review, revise and update was acknowledged. Few frameworks were found to be perfect first time around and over time others became outdated.

Indicators: A small number of core strategic areas were identified and were variously referred to as domains, elements, focus areas or strategic outcomes (Figure 5). Most frameworks used a tiered approach to organise

multiple indicators into sub-domains or groups linked to the core strategic areas of focus. In several examples the indicator selection and refinement process were informed by a conceptual analysis of the relationships between indicators and how the indicators related to the overarching strategic objectives of the framework.

Figure 5   Presentation of indicators in monitoring frameworks
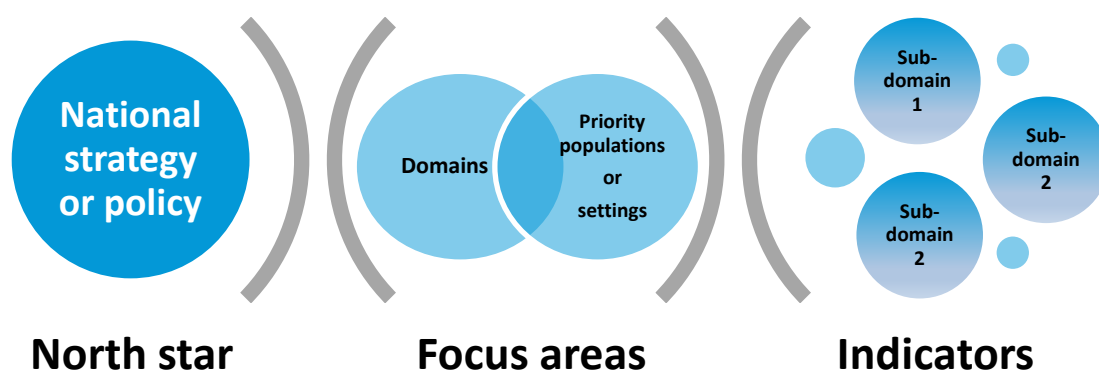
The total number of indicators, measures and metrics included in frameworks varied from 15 to 128; however, most frameworks included fewer than 50 indicators. There were several examples where indicators were classified as 'multi-domain'. In some cases results for indicators were disaggregated by population subgroups, for example, at risk groups or priority populations. No framework relied on a single indicator or index to monitor progress. One framework took a settings-based approach and others ensured area-level indicator data could be reported to support spatial analyses and geographically targeted policy responses (Centre of Research Excellence in Disability and Health 2020).

Frequently, indicators were not currently available for all domains and sub-domains. For example, this was because either indicators with available data were found to be unsuitable or no relevant indicators could be identified. This incompleteness was no impediment to the implementation of the monitoring framework but did result in a phased implementation of indicators. The AIHW National Strategic Framework for Chronic Conditions (NSFCC): reporting framework includes a helpful template to report indicator fields. (Australian Institute of Health and Welfare 2022, p. 22).

Table 15   Potential indicator fields

Fields	Definition
Short name	A short or common name or designation by which the indicator is known and might be identified.
Description	A short statistical description of an indicator. Values include percentage, count, proportion, mean (average), and percentile.
Rationale	A justification for inclusion of the indicator.
Definitions	A plain text description of concepts and the formulae used to calculate an indicator.
Numerator	A description of the number above the line in a fraction showing how many of the parts indicated by the denominator are taken.
Denominator	A description of the number below the line in a fraction.
Possible disaggregation	Identification of priority or important populations for which disaggregations are possible, limited to: age group, sex, Indigenous status, socioeconomic area, and remoteness.

Fields	Definition
Data sources and frequency	The data source is a specific dataset, database and reference from where data are sourced. How often the indicator has been reported in publications,
Issues	Any issues surrounding use of the indicator. These might include definitions changing over time, infrequent or discontinued reporting, variations in specifications across jurisdictions or internationally.
Interpretation	A short description to explain the meaning of an indicator. i.e. Whether a value going up or down is a measure of success.
National Frameworks	The National Framework which the indicator is reported in.
Further information	Where to go to find further details/specifications about the indicator.

Data collection: The need for nationally consistent data and ongoing data collection was identified. Priority was consistently given to using existing nationally available datasets where relevant. Several organisations did not have the resources and infrastructure to be a primary data collector or custodian of large datasets so were reliant on data collected by other entities. In addition to open data sources, baseline surveys were used.

Several frameworks identified data gaps such as the absence of any national data source for some indicators (Fortune et al. 2020).In some cases the organisation planned to directly commission or conduct data development by working with data custodians, or to improve data linkage between different sectors and jurisdictions. There were also examples of organisations building on existing national minimum datasets or creating their own to ensure data comparability across states and territories. In the context of the NWI monitoring framework it may be possible to engage organisations at an individual or industry-level to measure their own performance using an agreed minimum dataset and consistent tools, and to submit this data to a broader collection for national monitoring.

Most frameworks considered use of longitudinal and cross-sectional data. In one case it was stated that priority went to the most important modifiable factors when designing new measures. Another document noted that not all elements or sub-domains of the framework could be measured quantitatively and therefore the inclusion of appropriate qualitative indicators should be considered to enhance progress monitoring in the future. It was unclear whether evaluation activities were anticipated to collect this qualitative information.

Development: In their development, most of the monitoring framework examples examined 'stood on the shoulders of others' insofar as they looked for other existing frameworks to inform their development rather than starting from the beginning. In some cases this included international, national, state and territory and industry specific frameworks. The development process of all reviewed frameworks was iterative and progressive with a strong consultation component. Most frequently this occurred through existing engagement mechanisms, such as the use of expert advisory groups, and was characterised by inclusion of a wide range of stakeholders. The importance of joint partnership agreements to secure timely data from states and territories and potentially industry groups may need to be considered.

Analysis and reporting: Rarely was the planned approach to analysis, interpretation and use discussed in monitoring frameworks however, the expected frequency of reporting was included. Issues relating to data governance should be clearly addressed.

Several organisations intended to use a tiered approach to reporting, reflecting the primary interests of stakeholders. There were also examples of organisations intending to report progress publicly. The style of reporting is likely to influence engagement with the outputs of the monitoring framework. There are many excellent examples of innovative approaches to presenting baseline data such as the 'Disability and Wellbeing Monitoring Framework: Baseline indicator data for Australians aged 18-64 years' (Centre of Research Excellence in Disability and Health 2020), and for trend data the 24th Annual Willis Towers Watson Best

Practices in Health Care Employer Survey report (wtw 2019) (Figure 6). Any approach to benchmarking requires careful consideration and stakeholder engagement. Nevertheless, the development of benchmarks can have a motivating effect on quality improvement, especially when coupled with resources and advice. The possible positive impacts of benchmarking were noted in discovery research undertaken as part of the NWI, particularly in relation to the development of the Australian Workplace Barometer (Ernst & Young 2020a).

Figure 6   Example of employer trend reporting – emotional wellbeing strategy

Strategy
Have an organization-wide behavioral health strategy/action plan

Training
Offer training and coaching to managers specifically to identify emotional health issues, stress and episodic life events that impact work performance

Measure stress
Measure the stress of the workforce and the leading causes

Redesign EAP
Redesign your current employee assistance program to better address emotional and financial wellbeing for employees and dependents

Strategy: 25% (2019), 42% (2020*), 68% (2021^)
Training: 25% (2019), 40% (2020*), 62% (2021^)
Measure stress: 16% (2019), 30% (2020*), 53% (2021^)
Redesign EAP: 33% (2019), 50% (2020*), 74% (2021^)

Sample: Companies with at least 100 employees
Source: 2019 Willis Towers Watson Best Practices in Health Care Employer Survey

Structure and components: The format used for monitoring frameworks differed in length and complexity. It was useful when the framework was captured succinctly, for example refer to the Safe Work Australia National Return to Work Strategy Measurement Framework (Safe Work Australia 2019) which is four pages in length. Some frameworks included extensive technical detail and others moved this detail to a supporting technical paper.

Most frameworks included:

- A strategic orientation to the framework i.e. its purpose and the rationale for the framework, principles
- Overarching vision or monitoring and reporting outcomes
- Criteria for selection of indicators, measures and metrics
- Indicator specifications including definitions or descriptions
- Data sources
- Data gaps
- Reporting cycle
- Governance issues

Format: Paper-based formats relied on tables to summarise indicators, measures and metrics and information about data sources and collection. Most monitoring frameworks were initially produced as a document with several progressing to publicly accessible digital dashboards, such as that used in Australia's workplace gender equality scorecard (Workplace Gender Equality Agency 2022) and also via the WGEA data visualiser[5]. Australia's Health Performance Framework (Australian Institute of Health and Welfare 2021) is one of the most widely used national digital dashboards.

In summary, (Krusek. et al. 2004, p. 25) recommend a ten step process to developing, building and sustaining a results-based monitoring and evaluation system, which is depicted in Figure 7.

Figure 7   Steps to designing, building, and sustaining a monitoring and evaluation system
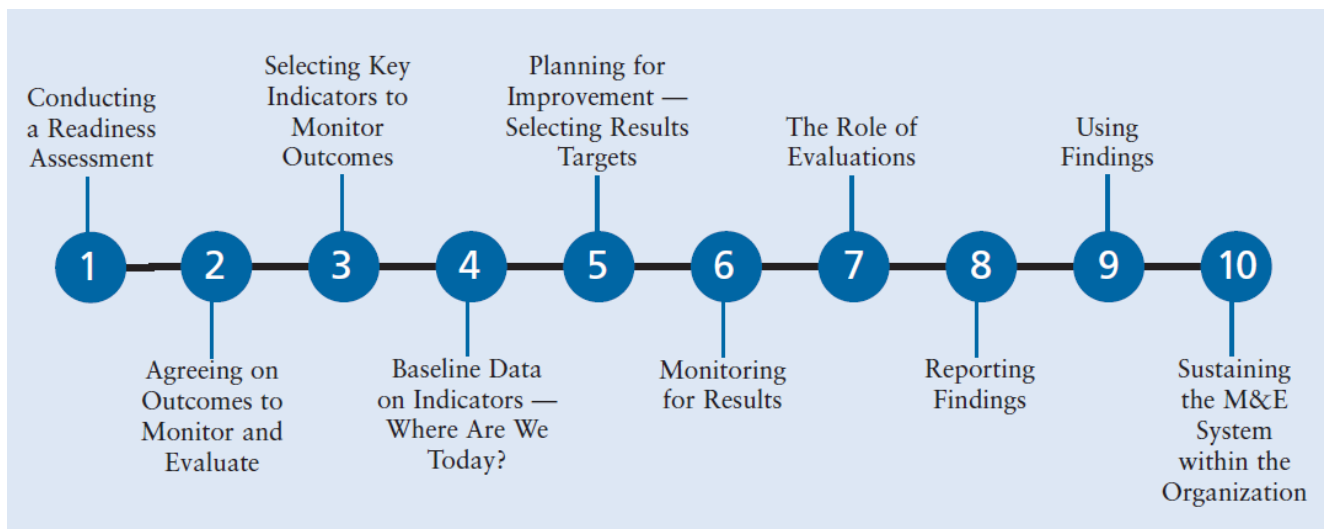
5.3   Baseline report of current state

We expect that the monitoring framework and the baseline report of current state will be developed iteratively based on feedback received through stakeholder consultations and advice provided by the Commission. The content of the baseline report of current state ultimately depends on the agreed indicators of the monitoring framework and, where required, the sign-off by data custodians.

As the final list of indicators is being developed, we will contact relevant data custodians and negotiate access conditions for baseline data and ongoing data governance. Where feasible we will also discuss potential processes for future data integration into the NWI digital portal and the availability of additional, more granular data.

Concurrently, we will work with the Commission and stakeholders on the format and design of the baseline report. Our considerations will take into account the needs of the users and draw on examples of user-friendly presentation of baseline information from other monitoring frameworks. We anticipate that the baseline report of current state will provide an early iteration of a 'dashboard' of progress at a national level to track system-level changes and improved mental health and wellbeing / workplace outcomes. It will highlight data gaps and suggest strategies to collect or secure these data in the future.

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[5] Available at https://data.wgea.gov.au/.

6   Next steps

6.1   Process for stakeholder consultation

This discussion paper poses a number of discussion points that we are seeking stakeholder feedback on. These issues have been posed as questions at appropriate places throughout this paper and are listed at the beginning of this paper.

After receiving feedback, work will continue to develop the indicators, measures and metrics and the structure of the monitoring framework and select datasets. We anticipate another consultation point as we continue this work.

6.2   Limitations

The desktop review method was used to review existing research for information relevant to measures, metrics and indicators that track mentally healthy workplaces internationally and within Australia. Our focus included relevant Australian datasets. This was carried out through a Google search using specific terms and parameters, a purposive search of Australian organisational websites and searching reference lists of relevant reports. Google searching and website searching was undertaken concurrently with each strategy helping to inform the other during the process. Whilst this approach has produced valuable insights and awareness, the quality of those findings depends on the relevance, timeliness and transparency of the source data which must be assessed on a case-by-case basis. Finally, a desktop review is naturally limited by what information is findable.

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Appendix 1 Desktop review process

Process

- Systematic searches
- Remove duplicates and scan for relevance
  n=31 items removed
- Discussion paper
- Apply shortlisting criteria
- Consult with stakeholders and experts
- Draft monitoring framework and baseline report of current state

Outcome

- 'Everything' list
  n=203
- Long lists n=172
  Approximately 25% of long list items related to data sets and the remainder to instruments
- Short lists
  Instruments n=TBC
  Data sets n=TBC
- Agreed set
  of indicators, measures, metrics and datasets

Appendix 2 Example of organisational websites searched

Organisation	Website
Government and statutory authorities: national	
Australian Bureau of Statistics (ABS)	https://www.abs.gov.au/
Australian Chamber of Commerce and Industry	https://www.australianchamber.com.au/
Australian Government workplace health and safety	https://business.gov.au/risk-management/health-and-safety/work-health-and-safety
Australian HR Institute	https://www.ahri.com.au/
Australian Human Rights Commission	https://humanrights.gov.au/
Australian Institute of Health and Welfare	https://www.aihw.gov.au/
Comcare - The national work health and safety, and workers' compensation authority	https://www.comcare.gov.au/
Fair Work Ombudsman	https://www.fairwork.gov.au/
Head to Health	https://www.headtohealth.gov.au/
National Mental Health Commission	https://www.mentalhealthcommission.gov.au/
Productivity Commission – Mental health	https://www.pc.gov.au/inquiries/completed/mental-health#report
Royal Commission into Victoria's Mental Health System	http://rcvmhs.archive.royalcommission.vic.gov.au/
Safe Work Australia	https://www.safeworkaustralia.gov.au/
Work Health & Safety and Workers' Compensation,	https://www.australianchamber.com.au/our-policies/work-health-safety/
Government and statutory authorities: state/territory	
NSW Government State Insurance Regulatory Authority (SIRA)	"Recovery through work measurement framework" https://www.sira.nsw.gov.au/corporate-information/recovery-through-work-measurement-framework .
NT WorkSafe	https://worksafe.nt.gov.au/
Office of Industrial Relations Queensland	https://www.oir.qld.gov.au/
SafeWork NSW	https://www.safework.nsw.gov.au/
SafeWork SA	https://www.safework.sa.gov.au/
WorkSafe ACT	https://www.worksafe.act.gov.au/
WorkSafe Queensland	https://www.worksafe.qld.gov.au/
WorkSafe Tasmania	https://worksafe.tas.gov.au/
WorkSafe Victoria	https://www.worksafe.vic.gov.au/
WorkSafe WA	https://www.commerce.wa.gov.au/worksafe
Industry	
Ai group	https://www.aigroup.com.au/
BUPA	https://www.bupa.com.au/

Organisation	Website
Consult Australia	https://www.consultaustralia.com.au/
icare	https://www.icare.nsw.gov.au/
Jobsafe SA	https://jobsafesa.asn.au/
Lendlease	https://www.lendlease.com/au/
NRMA	https://www.nrma.com.au/
Westpac	https://www.westpac.com.au/
Peak/advocacy	
Beyond Blue	https://www.beyondblue.org.au/
Black Dog Institute	https://www.blackdoginstitute.org.au/
Lifeline Australia	https://www.lifeline.org.au/
Mates in Construction	https://mates.org.au/
Mentally Healthy Change Group	https://www.mentally-healthy.org/
OzHelp Foundation – suicide prevention in Industry Workplaces	https://ozhelp.org.au/
Reachout	https://au.reachout.com/
SuperFriend	https://superfriend.com.au/
Research	
Australasian Faculty of Occupational & Environmental Medicine	https://www.racp.edu.au/about/college-structure/australasian-faculty-of-occupational-and-environmental-medicine
Centre for Workplace Excellence, University of SA	https://www.unisa.edu.au/research/cwex/
Future of Work Institute, Curtin University	https://www.futureofworkinstitute.com.au/
Work and Health Research Team, University of Sydney	https://www.sydney.edu.au/medicine-health/our-research/research-centres/work-and-health-research-team.html
International	
Economist Intelligence Unit (EIU)	https://www.eiu.com/n/
International positive psychology association	https://www.ippanetwork.org/
Mental Health at Work (UK)	https://www.mentalhealthatwork.org.uk/
Mental Health Commission of Canada	https://mentalhealthcommission.ca/
Mental Health Innovation Network	https://www.mhinnovation.net/
New Economics Foundations – Dynamic Model of Wellbeing	https://neweconomics.org/
The National Institute for Occupational safety and Health (NIOSH), CDC	https://www.cdc.gov/niosh/index.htm
Work on wellbeing website	https://workonwellbeing.com/

Appendix 3 Quality checks using peer-reviewed literature

Introduction

As outlined in the 'Methods' section the umbrella review of peer-reviewed literature was not undertaken because of the availability of other recent and directly relevant evidence reviews. Instead we drew from academic studies in four ways to cross-check the completeness of findings relating to indicators, measures and metrics that emerged from our grey literature searches for the desktop review. This included:

- Summarising the employee and employer outcomes reported in 245 effectiveness studies of interventions and strategies reported in NICE Guideline 212 Evidence Reviews.

- Searching 91 intervention studies for validated instruments, reported across four purposively selected international reviews specific to workplace mental health and wellbeing (Bamberger et al., 2012, National Institute for Health and Care Excellence, 2022a, National Institute for Health and Care Excellence, 2022b, Roodbari et al., 2021).

- Assessing four realist reviews relating to organisational mental health and wellbeing (Roodbari et al., 2021, Van Hees et al., 2021, , Carrieri et al., 2020) to understand mechanisms of change contributing to mentally healthy workplaces.

- Checking coverage of instruments against a recent unpublished review (involving one of our team members) of the literature on workplace wellbeing measures used in psychological research.

Coverage of key domains and indicators

Ideally, the monitoring framework will provide comprehensive coverage of all the domains and indicators that make up the construct 'workplace mental health and wellbeing'. In practice, it may not be possible to provide operational definitions (i.e., validated tools, measures and metrics) or data for all the possible indicators; however, it is desirable to identify any gaps and, where possible, seek to address these in future.

We looked to the academic literature to understand how workplace mental health and wellbeing is defined and measured in research, compared with the operational definitions available in the grey literature. Because a full review of academic literature was not in scope, we drew on readily available, recent examples of literature reviews as an efficient approach to cross check the findings of the desktop review.

UK NICE Guideline evidence reviews

The UK National Institute for Health and Care Excellence (NICE) released a 'Mental Wellbeing at Work' guideline in March 2022 which aims to promote a supportive and inclusive work environment, train and assist managers and support people who have or at risk of poor mental health (National Institute for Health and Care Excellence 2022a).

The recommendations in this guideline emphasised the primary importance of organisation-wide strategic approaches as the foundation for good mental wellbeing at work. A preventive and proactive strategic approach was seen as crucial. A tiered process of addressing mental wellbeing was recommended with organisational-level approaches foundational, individual approaches building upon this and targeted approaches the top tier. Targeted approaches focus on employees deemed to be at risk of poor mental wellbeing and can be delivered at the organisational or individual level. The guideline emphasises that without an organisation-wide approach, it is unlikely that individual or targeted interventions will be successful. The necessity of systematic support for managers was also recognised.

In the NICE guideline and accompanying documents, there is strong alignment with the three pillars that form the basis of the NWI strategy. Recommendations encompass:

- identifying and reducing risks to *protect* employees,

- providing organisational support to *respond* to employees identified as having or being at risk of poor mental health, and

- collaborating to *promote* a positive workplace culture through communication and fostering good relationships between managers and employees.

The recommendations also note a need for further research to identify which outcomes would be useful in a core outcome set for research into workplace mental health and wellbeing.

Outcomes identified in the NICE reviews

The background literature reviews for the NICE guidelines included 245 studies that evaluated the effectiveness of interventions or strategies (National Institute for Health and Care Excellence 2022b, 2022c, 2022d, 2022e). The outcomes measured across these studies are summarised in Figure 8. Quantitative outcomes were defined as any measure of mental wellbeing, using objective measures or validated self-report measures (National Institute for Health and Care Excellence 2022b). Other outcomes were specified in the methods protocol for each review. Where data were reported on the same outcome (as defined in the protocol), for example, job stress, burnout or fatigue, these were all pooled into a single outcome for the analyses.

The NICE reviews included 48 studies of universal organisational-level interventions and nine (9) studies of targeted organisational interventions. There were188 studies where the interventions were aimed at employees, both universal individual-level approaches (150) and individual targeted interventions (38). What is striking is that across all four categories of intervention studies only one employer outcome was identified, productivity, and this was from a universal organisation level intervention. Productivity was categorised as an employee outcome in individual level interventions (universal and targeted) and in a targeted organisational level intervention.

Four employee outcomes common to studies of interventions and strategies from all four quadrants included: absenteeism, job stress, mental health symptoms and mental wellbeing. There were also four employee outcomes reported in three of the quadrants (universal organisational-level interventions, universal individual-level interventions and individual targeted interventions): job satisfaction, mental health literacy, presenteeism and quality of life.

Figure 8   Employee outcomes: NICE Guideline 212 Evidence Reviews

Universal Organisational - level interventions (48 studies)		Organisational Targeted (9 studies)
Employee Outcomes		*Employee Outcomes*
Absenteeism	Mental health knowledge	Absenteeism
Burnout [6]	Mental health literacy	Anxiety
Climate/Workplace climate – Civility, Culture [7]	Mental health symptoms	Burnout
Depression	Mental wellbeing	Depression
Empowerment	Presenteeism	Hospital anxiety and hospital depression
Exhaustion [8]	Psychological capital	Job stress
Job satisfaction/Career satisfaction	Quality of life	Mental health symptoms
Job stress	Stress [9]	Mental wellbeing
	Wellbeing [10]	Perceived stress
	Work engagement [11]	Productivity
	Workplace distress	Resource use (intention to seek help)
Universal Individual - level approaches (150 studies)		**Individual Targeted (38 studies)**
Employee Outcomes		*Employee Outcomes*
Absenteeism		Absenteeism
Climate - work climate		Engagement/Job engagement
Employee retention		Job motivation
Job satisfaction		Job satisfaction
Job stress		Job stress
Mental health literacy		Mental health literacy
Mental health symptoms		Mental health symptoms/Symptoms of mental health conditions
Mental wellbeing		Mental wellbeing
Presenteeism		Presenteeism
Productivity		Productivity
Psychological distress		Quality of life
Quality of life		Uptake of support services
Resilience		
Uptake of support services		

Outcome recorded in all four quadrants   Outcome recorded in three out of four quadrants

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[6] Burnout also reported as Burnout (depersonalisation) and Burnout (emotional exhaustion)

[7] Culture also reported as workplace culture – self-reported work experience

[8] Note stress categories below.

[9] Stress also reported as work stress, perceived stress, stress – burnout, stress – emotional exhaustion, stress – emotional job demands, stress – exhaustion and stress -self-defined burnout

[10] Wellbeing also reported as Wellbeing – professional efficacy, Wellbeing – psychological capital, Wellbeing – self-efficacy.

[11] Work engagement also reported as Mental wellbeing work engagement and wellbeing work engagement

Realist reviews

A realist synthesis or realist review is a strategy for synthesising research which has an explanatory focus and is theory driven. Realist reviews seek to unpack the mechanisms that explain how an intervention works (or fails to work) in particular contexts or settings. Realist reviews aim to provide a practical understanding of complex social interventions (Pawson et al. 2005) by highlighting the context in which interventions are implemented, the mechanisms by which they are assumed to work, and the outcomes that are measured. Together, these three elements are known as Context-Mechanism-Outcome configurations (CMOc).

Four realist reviews relating to organisational mental health and wellbeing (Carrieri et al. 2020; Gray et al. 2019; Roodbari et al. 2021; Van Hees et al. 2021) were searched for Context-Mechanism-Outcome configurations to identify:

- How outcomes were defined, and which contextual factors and mechanisms were linked with each outcome;

- Whether potentially useful organisation-level indicators could be identified from these Context-Mechanism-Outcome configurations.

These reviews were inspected with an organisational lens for Context-Mechanism-Outcome configurations that function to protect, respond or promote workplace mental health and wellbeing. Tables and discussion sections were read especially closely for information about these configurations.

Understanding the relationship between context, mechanisms and outcomes arising from interventions to improve workplace mental health and wellbeing provided additional insights about potential indicators of mentally healthy workplaces. In total, forty-two CMOcs were identified across the four reviews (Table 16).

Table 16   Context-Mechanism-Outcome configurations identified in realist reviews

No	Author	Context	Mechanisms triggered	Outcomes
1	Roodbari et al. (2021)	■ The rationale behind the implementation process of the intervention is clear with a theoretical basis ■ There is a supportive culture and lack of adverse events ■ Senior and middle management support the implementation of the intervention ■ There are sufficient resources in the organisation	Implementation of intervention adherence	■ Improved psychosocial risk management ■ Improved psychosocial conditions ■ Improved employee health and wellbeing
2		■ A trusting, open and supportive organisational climate ■ Sufficient resources in the organisation	Communication	■ Improved employee health and wellbeing ■ Improved organisational (productivity) outcomes
3		■ A trusting, open and supportive organisational climate ■ Managers support interventions ■ Training and participatory recruitment process for employees who provide co-worker support ■ There is a positive economic environment surrounding the organisation and lack of unfavourable internal events	Employees participate in interventions	■ Improved psychosocial risk management ■ Improved psychosocial working conditions ■ Improved employee health and wellbeing ■ Improved organisational outcomes

No	Author	Context	Mechanisms triggered	Outcomes
		▪ The organisation has structural resources		
4		▪ Alignment between the mission and objectives of the organisation and the aims of the intervention ▪ There are sufficient resources in the organisation	Senior management support	▪ Improved psychosocial work conditions ▪ Improved employee health and wellbeing ▪ Improved organisational outcomes
5		▪ Senior managers are committed to the intervention ▪ Pre-intervention working conditions are moderate to good level ▪ There is training for middle managers ▪ Employees participate	Middle management support	▪ Improved psychosocial risk management ▪ Improved psychosocial working conditions ▪ Improved employee health and wellbeing ▪ Improved organisational outcomes
6		▪ Managers of the organisation cooperate with the external consultants/ ▪ researchers ▪ External consultants/ ▪ researchers have the necessary expertise in organisational psychology ▪	External consultant/ researcher support	▪ Improved psychosocial risk management ▪ Improved psychosocial working conditions ▪ Improved employee health and wellbeing ▪ Improved organisational outcomes
7	Van Hees et al. (2021)	▪ Open organisational climate ▪ Trustful and available supervisor ▪ Openness from supervisor ▪ Employees mirrors supervisor	Better organisational climate	▪ Staying at work
8		▪ Offered adequate and timely support ▪ Supportive relationships with colleagues and supervisor ▪ Meaningful relations at work ▪ Work related social support ▪ Facilitator from independent professional ▪ Supportive communication from facilitator	Better social support	▪ Staying at work
9		▪ Manageable workload ▪ Low job demands/ high job control ▪ Job modifications and making adjustments ▪ Absence of overtime/over house and job strain	Manageable job characteristics	▪ Staying at work
10		▪ Psychological flexibility ▪ Being highly motivated ▪ Talking about symptoms	Better coping styles	▪ Staying at work

No	Author	Context	Mechanisms triggered	Outcomes
		▪ Learning active coping skills and exerting control over work ▪ Evaluating workload		
11		▪ Good self-reported health ▪ No additional health complaints ▪ Individual treatments ▪ Better work productivity ▪ Decreased exhaustion ▪ Increased cognitive functioning	Better health symptoms and lower severity of health symptoms	▪ Staying at work
12		▪ Personal resources ▪ Financial resources	Better personal context	▪ Staying at work
13		▪ Multiple components ▪ Use of online or telephone support ▪ Tailoring care to transfer skills into daily life	Greater features with interventions	▪ Staying at work
14		▪ Managerial support after training ▪ Trust and empathy received by employee ▪ Continuous practical job support from colleagues and supervisor	Better social support	▪ Work performance
15		▪ Perceived low demand and high control	Better perceived job characteristics	▪ Work performance
16		▪ Learning to manage job ▪ Reaching out for support to supervisor ▪ Calming space ▪ Learning to cope with symptoms of poor mental health	Increased coping styles and ability	▪ Work performance
17		▪ Lower severity/less symptoms of pre-existing mental health ▪ Absence of chronicity or additional health complaints ▪ Receiving individual therapy ▪ Increased cognitive functioning	Better physical health symptoms and lower severity of pre-existing mental illness	▪ Work performance
18		▪ Tailoring of intervention to be transferable	Practical features of work performance interventions (IN)	▪ Work performance
19	Carrieri et al. (2020)	▪ Basic support structures enable doctors to do their job	Make up for deficiencies of the organisation for patients and colleagues	▪ Contribute to toxic working culture where being overworked is normalised
20		▪ High workload and its negative consequences (stress, burnout) are normalised	Sick doctors feel as though they are letting down their colleagues and patients	▪ Presentism ▪ Mental health consequences ▪ Workforce retention

No	Author	Context	Mechanisms triggered	Outcomes
21		▪ Lack of autonomy over work ▪ Less meaningful work	Dissatisfied with job	▪ Stress and mental-ill health
22		▪ Professional culture where mental-ill health and vulnerability may be seen as unprofessional	Feelings of shame and feelings of not living up to professional identity	▪ Begin hiding difficulties from themselves and colleagues
23		▪ Mental health support is available, but they understand the system and confidentiality is difficult to achieve	Fear seeking support could jeopardise career	▪ Hide distress and not seek support
24		▪ Physical and emotional isolation	Less supported by colleagues and mistrust groups	▪ Vulnerable to work-related pressure and mental ill-health
25		▪ Positive and meaningful workplace relationships	Belonging between colleagues and profession	▪ Increased capacity to work under pressure
26		▪ Working functional groups	Feeling supported and more ease with vulnerability	▪ Normalise vulnerability ▪ Reduce stigma around mental-ill health
27		▪ Having less connectedness and meaning at work	Find fulfilment outside of work	▪ Less likely to improve condition
28		▪ Sick doctors with particularly delicate circumstances	Don't feel safe to share problems and don't identify with other team members	▪ Dysfunctional groups ▪ Intensification of mental-ill health
29		▪ Protected times and psychologically safe spaces for congregation within the confines or work environment	Likely to create bonds	▪ Improve connectedness across organisation
30		▪ Supervision and feedback recognise both positive and negative performance and promote learning	Feelings of being fairly treated and valuing colleagues	▪ Connectedness and engagement in work ▪ Supportive work culture
31		▪ Environment that actively demonstrates importance of balance between health and wellbeing with fighting stress and mental ill health	Feelings that caring about own wellbeing is legitimate and less afraid to acknowledge vulnerability	▪ De-stigmatisation of mental-ill health and vulnerability
32		▪ Positive and negative aspects of career are recognised	Feeling less inadequate and helpless when they experience stress or mental-ill health	▪ Increased capacity to deal with work pressure ▪ Recognition and acceptance of vulnerability
33		▪ Timely support when vulnerable (e.g. after suicide attempt, death of a colleague)	Represent their only source of hope	▪ Reduce the intensity of mental-ill health and its related outcomes, including suicide.
34		▪ Intervention is endorsed by organisation and senior leadership	Feelings of frustration and inability to access intervention due to work constraints	▪ Less likely to engage

No	Author	Context	Mechanisms triggered	Outcomes
35		▪ Those delivering interventions do not have the specific training to address the needs	Less likely to trust the intervention	▪ Ineffective intervention ▪ Intervention not accessed
36		▪ Involvement in the development and implementation of interventions	Feel ownership over intervention	▪ More likely to use intervention and for it to be effective
37		▪ Outcomes of the interventions and the wellbeing of the workforce are regularly monitored	Commitment to act upon the outcome of these regular review exercises is shown	▪ Engage efforts to tailor interventions ▪ Greater awareness about vulnerability and wellbeing
38	Gray et al. (2019)	▪ Improvements in workplace culture ▪ Fully integrating health into the workplace culture and organisation ▪ Physically supportive, emotionally supportive, leadership support, peer encouragement, team building ▪ Providing employees the time and capacity to participate	Increased stakeholder engagement and support	▪ Positive outcomes of interventions and implementation of interventions in organisation. ▪ More employee engagement and job satisfaction ▪ Negative correlations with mental ill health
39		▪ Incremental changes within comprehensive transformation strategy identified as guiding principle for ways to engage in culture change ▪ Continuous improvement rather than discrete and singular efforts ▪ Ongoing support intervention provided by the organisation	Sustainable interventions	▪ Positive organisational culture change ▪ Positive sustainability/ improvement of positive mental health changes
40		▪ Awareness and managerial support regarding discrimination that occurs through victimisation, stigma, discrimination, and loss of support next works etc.	Lowered stigma and discrimination	▪ Promotion of help seeking behaviour in employees ▪ Lowering social and economic cost of mental health.
41		▪ Promotion/involvement and participation of workers and representatives along with management in the intervention implementation	Well-developed health and safety management	▪ Increased organisational involvement in implementing successful interventions ▪
42		▪ Recognition of diversity of different workers who require different support ▪ Process considerations linked to the mechanisms for change	Management of complexity and diversity within an intervention	▪ Intervention has positive impacts on people of all ages and cultures.

The realist syntheses that were reviewed contributed to our overall understanding of how contexts and mechanisms in workplaces can interact to produce positive mentally healthy workplace outcomes at an

organisational level. However, there was a clear gap when it came to constructs and mechanisms that aided in *responding* to poor mental health within the workplace.

Coverage of commonly used instruments

The aim of this part of the quality check was to provide an overview of current validated instruments that are commonly used *in research* to measure aspects of a mentally healthy workplace, along with identifying outcomes and indicators associated with these instruments. This was conducted in order to inform the development of the draft monitoring framework and to provide a guide for indicators that could be measured at a national level to track mentally healthy workplaces.

Unpublished review of workplace wellbeing measures

We had access to an unpublished review of workplace wellbeing measures which a member of our team contributed to in conjunction with colleagues from the School of Psychology at the University of Wollongong. This unpublished review, conducted in 2017, identified over 100 different tools/scales/measures to measure wellbeing at work (Robinson 2018). Most instruments identified were general wellbeing instruments (not designed for workplaces), the most commonly used (ten or more references) being the GHQ-12, WHO-5, Warr 1990 scale, Ryff 1989 scales of psychological wellbeing, Warwick-Edinburgh Mental Well-being Scale (WEMWBS), Ryff and Keyes 1995, Personal Wellbeing Index (PWI), Satisfaction With Life Scale (SWLS), Positive and Negative Affect Schedule (PANAS), Brunetto 2011 scale, Subscale of Copenhagen Psychosocial Questionnaire (COPSOQ), and GHQ-28.

Table 17   General wellbeing instruments (≥10 studies)

Measure used	Number of studies
GHQ-12	70
WHO-5	41
Warr 1990 scale	37
Ryff 1989 scales of psychological wellbeing	33
Warwick-Edinburgh Mental Well-being Scale (WEMWBS)	25
Ryff and Keyes 1995	18
Personal wellbeing index (PWI)	18
Satisfaction With Life Scale (SWLS)	17
Positive and Negative Affect Schedule (PANAS)	16
Subscale of Copenhagen Psychosocial Questionnaire (COPSOQ)	10
GHQ-28	10

Workplace-specific instruments (used in more than one study) were the Job-related Affective Well-being Scale (JAWS), Brunetto 2011 Scale, Index of Psychological Well-Being at Work (IPWBW), Workplace Wellbeing Index (WWBI), Well-being at Work Scale (WBWS), Employee wellbeing: average score from 5 subscales of the PSYCONES questionnaire and the Mental wellbeing subscale of Occupational Stress Indicator 2 (OSI-2). An industry-specific instrument used in more than one study was the Teacher Well-Being Scale (Collie, 2014).

Table 18   Workplace-specific wellbeing instruments (≥ 2 studies)

Measure used	Number of studies
Job-related Affective Well-being Scale (JAWS)	18
Brunetto 2011 scale	9
Index of Psychological Well-Being at Work (IPWBW)	4
Workplace Wellbeing Index (WWBI)	4

Measure used	Number of studies
Well-being at Work Scale (WBWS)	3
Teacher Well-Being Scale	2
Employee wellbeing: average score from 5 subscales of the PSYCONES questionnaire	2
Mental wellbeing subscale of Occupational Stress Indicator 2 (OSI-2)	2

Validated instruments in NICE Evidence Reviews

As part of the NICE Guideline 212 development, a comprehensive series of evidence reviews were produced that assessed the long-term effectiveness and cost effectiveness of organisational level approaches for all organisations (universal and targeted organisational-level approaches) and individual level interventions (universal and targeted individual-level approaches). Evidence was also assessed relating to the long-term effectiveness (more than six months) of manager training on employee mental wellbeing. We examined these reviews to identify the instruments used to assess effectiveness. A total of 32 instruments were identified Appendix 4. For the purpose of reporting our findings we have broken the instruments up into three separate categories:

- *Organisation - Workplace-specific:* This category refers to instruments that were designed to measure concepts relating to workplace mental health at an organisation level (compared to mental health at a broader population level). For example, the instrument asks questions relating to the broader organisation (i.e., I am committed to the organisation I work for).

- *Individual – Workplace-specific:* This category refers to instruments that were designed to measure concepts relating to workplace mental health, through questions at an individual level. For example, the instrument asks questions relating to the individual as opposed to the workplace (i.e., I am committed to my role).

- *Individual- Non workplace-specific:* This category refers to instruments that were designed to measure broader outcomes of workplace mental health and were not necessarily designed for workplaces specifically. For example, the instrument asks broad questions about general wellbeing or psychological health (i.e., I often feel sad).

Table 19 displays the numbers of instruments identified for each of the categories outlined above. These have also been broken into each of the NWI pillars. As would be expected, given our discussion of the outcomes reported in these studies there were far more instruments measuring individual level constructs of a mentally healthy workplace compared to organisation-level constructs. There were no non-workplace-specific (individual-level) instruments that consistently appeared in the literature that reflected the 'respond' or 'promote' pillars. All of the identified instruments for this category measured negative psychological constructs such as depression. For example, there were no instruments that appeared consistently (three times or more) that measured factors such as resilience or self-esteem (promote pillar).

Table 19   Search results

Level	Protect	Respond	Promote	Total
Workplace-specific organisational	2	0	8	10
Workplace-specific individual	9	1	5	15
Non-workplace-specific individual	7	0	0	7
Total	**18**	**1**	**13**	**32**

The compilation of this information resulted in the identification of indicators and outcomes of a mentally healthy workplace at both an individual and organisational level, as well as the corresponding validated instruments used for measurement.

Organisation-level instruments

Table 20 displays information relating to organisation-level instruments that were identified within the academic literature across each of the three NWI pillars.

Table 20   Organisation level outcomes, indicators and instruments

Outcome	Indicators	Instruments
Psychological wellbeing and safety within the workplace	■ Senior management values and attitudes towards mental health ■ Organisational communication ■ Management priority to psychological health and safety organisational participation and involvement in protecting workers mental health (i.e. interventions)	■ The Psychosocial Safety Climate (PSC-12) ■ The Michigan Organizational Assessment Questionnaire
Positive changes in organisational culture/ climate and psychosocial work environment	■ Effective communication from leadership ■ Management policies and mental health promotion clarity ■ Job resources and demand	■ The Organizational Commitment Questionnaire ■ The Organisational Climate Questionnaire ■ Nordic Questionnaire on Positive Organisation Psychology (N-POP) ■ The Organizational Effectiveness Scale ■ Cooks and Wall (1980) Interpersonal Trust at Work Scale ■ Meyer & Allen Affective Organizational Commitment Scale ■ The General Nordic Questionnaire for Psychological and Social Factors at Work ■ Work Experience Measurement Scale (WEMS)

Individual-level instruments

Most of the interventions described in the NICE-reviewed studies concentrated on outcomes and indicators of a mentally healthy workplace at an individual level. Table 21 displays information relating to individual level instruments identified in the literature.

Table 21   Individual level outcomes, indicators and instruments

Outcome	Indicators	Instruments
Lower levels of mental-ill health	▪ Burnout ▪ Workplace bullying ▪ Effort/reward balance ▪ Job security ▪ Negative psychological states ▪ Insomnia ▪ Physical health	▪ The Copenhagen Burnout Inventory (CBI) ▪ Copenhagen Psychosocial Questionnaire (COPSOQ) ▪ Seigrest Effort Reward Imbalance Questionnaire (ERI) ▪ Maslach Burnout Inventory (MBI) ▪ The Job Insecurity Scale (JIS) ▪ Oldenburg Burnout Inventory (OBI) ▪ Hamburg Burnout Scale (HBI) ▪ Job Security Index (JSI) ▪ Job Content Questionnaire (JCQ) ▪ <u>Non- workplace-specific:</u> ▪ 36-Item Short Form Survey (SF-36) ▪ Depression Anxiety Stress Scale (DASS-21) ▪ Beck Depression Inventory (BDI) ▪ Psychiatric Symptom Index (PSI) ▪ General Health Questionnaire (GHQ) ▪ Hospital Anxiety and Depression Scale (HADS) ▪ Mental Health Index (MHI)
Good job productivity and lowered absenteeism	▪ Work participation ▪ Work productivity ▪ Absenteeism	▪ Work Ability Index (WAI)
Positive wellbeing and job autonomy	▪ Job motivation/ crafting ▪ Work engagement ▪ Physical work environment	▪ The Job Crafting Questionnaire (JCQ) ▪ Utrecht Work Engagement Scale (UWES) ▪ Warr's Scale of Job- Related Affective Wellbeing ▪ Work Extrinsic and Intrinsic Motivation Scale (WEIMS) ▪ Physical Work Environment Satisfaction Questionnaire (PWESQ)

Summary of quality checks

Outcomes and indicators

By documenting the outcomes reported in intervention studies and reviewing the NICE guideline background research, we sought to identify what researchers in workplace mental health and wellbeing regard as important to measure. Most commonly, researchers measure outcomes for individual employees, even when interventions are targeted at organisations. This may reflect the dominance of organisational psychology perspectives in the literature, and suggests a need for more (published) evaluations which carefully describe implementation processes and outcomes at the organisation level. The most frequently measured individual-level outcomes in the academic literature are absenteeism, job stress, mental health symptoms and mental wellbeing, along with job satisfaction, mental health literacy, presenteeism and quality of life. With the exception of absenteeism and presenteeism, the remaining outcomes are featured often in the workplace-specific instruments and surveys that were identified through the desktop review. This is reassuring and suggests that these instruments are capturing important and relevant constructs.

There is no suggestion that the outcomes included in Figure 8 are optimal for monitoring, rather they reflect what has been measured in practice in a large number of studies, noting the bias to individual level studies. Although defined for the purposes of the NICE reviews as 'outcomes', some of these could also be considered for use as lead indicators of workplace mental health (e.g., mental health literacy).

Interestingly, the process of unpacking Context-Mechanism-Outcome configurations in the realist reviews uncovered many more outcomes (and corresponding mechanisms) that apply at the organisation level and are commonly measured in workplace-specific instruments. These include mechanisms associated with effective psychosocial risk management such as manageable job demands, reduced stigma and discrimination around mental illness, positive organisational culture, effective communication, and effective management of diversity, as well as employees' mental health and personal resources (e.g., coping strategies).

Instruments

The instruments identified in the NICE reviews and the unpublished workplace reviews were paired with the findings from the desktop review. In total these searches identified an additional thirty three instruments. Of these instruments, nine measured at an organisational level and were designed specifically for a workplace. Seventeen were measured at an individual level and were also designed specifically for workplace use. Finally, there were an additional seven instruments identified that measured at an individual level but were generic non-workplace-specific instruments that have been commonly used within the field of workplace mental health and wellbeing research. These additional instruments have been listed in Table 22.

Table 22   Additionally identified instruments

Instrument name
Organisational- Workplace-specific
The Michigan Organizational Assessment Questionnaire
Work Experience Measurement Scale (WEMS)
The Organizational Commitment Questionnaire (OCQ)
Organizational Effectiveness Scale
Nordic Questionnaire on Positive Organisational Psychology (N-POP)(Christensen 2012)
Cooks and Wall (1980) Interpersonal Trust at Work Scale
Meyer & Allen Affective Organizational Commitment Scale
Organisational Climate Questionnaire (OCQ)
The General Nordic Questionnaire for Psychological and Social Factors at Work
Individual -Workplace-specific
Copenhagen Burnout Inventory (CBI)
Hamburg Burnout Inventory (HBI)
Copenhagen Psychosocial Questionnaire (COPSOQ) (3 length versions available)
Job Security Index (JSI)
Work Ability Index (WAI)
Work Extrinsic and Intrinsic Motivation Scale (WEIMS)
Physical Work Environment Satisfaction Questionnaire (PWESQ)
The Job crafting Questionnaire (JCQ)
Warr's Scale of Job-Related Affective Wellbeing
Job-related Affective Well-being Scale (JAWS)
Brunetto 2011 scale

Instrument name
Index of Psychological Well-Being at Work (IPWBW)
Workplace Wellbeing Index (WWBI)
Teacher Well-Being Scale (Collie, 2014)
Well-being at Work Scale (WBWS)
Employee wellbeing: average score from 5 subscales of the PSYCONES questionnaire
Mental wellbeing subscale of Occupational Stress Indicator 2 (OSI-2)
Individual – Non-workplace-specific
General Health Questionnaire (two lengths) (GHQ-12 or GHQ28)
Hospital Anxiety and Depression Scale (HADS) (Spinhoven et al. 1997)
Psychiatric Symptom Index (PSI) (Ilfeld Jr 1976)
Warr 1990 Scale
Ryff 1989 scales of Psychological Wellbeing
Ryff and Keyes 1995
Positive and Negative Affect Schedule (PANAS)

Our results indicate a clear majority measured change at the individual level (i.e., person outcomes) compared to an organisational level (i.e. workplace outcomes) across many intervention studies. Many of the interventions reviewed concentrated on outcomes related to the implementation of specific strategies or interventions (wellbeing interventions, mental health first aid, peer support, job crafting) in the workplace and how this can impact a person's work related mental health and/or productivity, rather than the impact this may have on organisational culture and psychosocial environments. There was a remarkable lack of studies focused on 'responding' to mental-ill health in the workplace. This demonstrates an obvious gap within the literature and prior research.

A closer examination of the findings from the quality check may yield some additional ideas that could be considered for inclusion in the NWI monitoring framework. Nevertheless, we can be reasonably confident that the desktop review, combined with the quality check, has succeeded in identifying the constructs and indicators that researchers regard as 'important to measure' and the instruments commonly used for measurement.

Appendix 4 Validated instruments identified from NICE Evidence Reviews

Name of instrument	NWI Pillar [12]	Indicators	Outcomes
Organisational level instruments- Workplace-specific			
Psychosocial Safety Climate (PSC-12) (Hall et al. 2010)	Protect	▪ Senior management values and attitudes ▪ Management priority to psychological health and safety ▪ Organisational communication ▪ Organisation participation and involvement	▪ Psychological wellbeing and mental health
The Michigan Organizational Assessment Questionnaire (Cammann et al. 1979)	Protect	▪ Job satisfaction ▪ Psychological states that arise from work ▪ Work group functioning ▪ Supervisory behaviour ▪ Control of work	▪ Identification of strengths and resources within workplace ▪ Workplace health promotion
Work Experience Measurement Scale (WEMS) (Nilsson 2010)	Promote	▪ Management ▪ Reorganisation ▪ Internal work experience ▪ Pressure of time ▪ Autonomy ▪ Supportive working conditions	▪ Identification of strengths and resources within a workplace ▪ Workplace health promotion
The Organizational Commitment Questionnaire (OCQ) (Kanning & Hill 2013)	Promote	▪ Attitude towards organisation ▪ Commitment related Behaviours	▪ Organisational culture
Organizational Effectiveness Scale (Tayal et al. 2021)	Promote	▪ Communication ▪ Advanced opportunity ▪ Proactivity ▪ Belongingness ▪ Task significant ▪ Goal orientation ▪ Security	▪ Organisational culture
Nordic Questionnaire on Positive Organisational Psychology (N-POP) (Christensen 2012)	Promote	▪ Individual resources ▪ Job demands ▪ Job resources ▪ Work-related experiences and attitudes ▪ Individual wellbeing ▪ Organisational performance.	▪ Psychosocial environment/ mentally healthy organisations

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[12] In several instances the scales listed could be classified against more than one pillar.

Name of instrument	NWI Pillar[12]	Indicators	Outcomes
Organisational level instruments- Workplace-specific			
Cooks and Wall (1980) Interpersonal Trust at Work Scale (Cook & Wall 1980)	Promote	▪ Faith in the intentions of others (managers) ▪ Confidence in the ability of others ▪ Capability and reliability	▪ Work related satisfaction and happiness
Meyer & Allen Affective Organizational Commitment Scale (Meyer & Allen 1991)	Promote	▪ Continuous commitment to organisation ▪ Affective commitment to organisation	▪ Job involvement and satisfaction ▪ Job performance ▪ Organisational behaviour
Organisational Climate Questionnaire (OCQ) (Combrink 2004)	Promote	▪ Affect towards other people ▪ Affect towards management ▪ Policy and promotion clarity ▪ Job pressure and standards ▪ Openness of upward communication ▪ Risk in decision making	▪ Employee satisfaction and wellbeing ▪ Organisational culture
The General Nordic Questionnaire for Psychological and Social Factors at Work (Lindström et al. 2000)	Promote	▪ Leadership ▪ Social support ▪ Commitment ▪ Work motivation ▪ Social climate ▪ Decision making ▪ Role clarity ▪ Demands	▪ Psychosocial work environment

Appendix 5 Definitions of mentally healthy workplaces

The Blueprint for Mentally Healthy Workplaces contains detailed descriptions of what constitutes mentally healthy workplaces for sole traders, small businesses and medium to large organisations (National Mental Health Commission 2022). These are reproduced below.

What do mentally healthy workplaces look like for a sole trader?

Sole traders recognise the importance of looking after their own mental health as an essential investment in the quality of their work. They set healthy boundaries that allow time to connect and recharge.

They recognise that good business practices are also good for mental health, with effective and compliant processes reducing some of the stress that can come with running a business. They reach out for help when required, whether it is with finances, administration, strategy or mental health.

When working with other people, sole traders feel equipped to support others. They recognise that organisations and businesses subcontracting work to sole traders have a duty to identify and manage work-related risks to mental health.

Sole traders also recognise the impact that their work has on others and understand their role in protecting, responding and promoting mental health in people around them. They understand the value of a strong professional and personal network for providing support in tough times.

What do mentally healthy workplaces look like for small businesses?

Small business owners model the importance of looking after mental health as an essential investment in business health. They balance the pressures of running a small business with time away to connect and recharge, and encourage their people to do the same.

Small business owners recognise that addressing psychological hazards at work is as important as addressing physical hazards and do what they can to support people in their roles. Effective planning and management of rosters, workloads, equipment and technology all contribute to supporting mental health. They recognise that good business practices are also good for mental health, with effective and compliant processes reducing some of the stress that can come with running a business.

Small business owners support their people through the peaks and dips of being in a small business by keeping communication open, listening to concerns and finding ways to support their valued teams. These initiatives may be informal, but they make people feel heard and valued.

Small business owners ensure their people have the autonomy, resources, skills and support they need to perform their roles. Workers are clear about what is expected of them, they feel confident raising issues, and feel connected to the team and valued for their contributions. People feel they can be themselves at work, no matter who they are.

What do mentally healthy workplaces look like for medium to large organisations?

Top management teams, such as executives and senior managers, make a commitment to mental health that is visible across all policies, processes and practices. They create a safe and inclusive environment from the top, starting with what they say and do. Top management proactively invest in a strategic approach that integrates best practice into operations, safety and human resources, beyond legislated requirements. Top management prioritise good work design that considers the work, the organisation's systems, the physical work environment, and the needs and experiences of workers. Top management design their systems, technologies, and work practices to ensure work responsibilities can be carried out in a mentally healthy way. They consider people's mental and physical health alongside meeting productivity targets.

Managers are trained and capable, with people management recognised as a critical skill requiring ongoing development. Managers are recognised as the people who shape the day-today experience of work for many, and are empowered and accountable for this essential role. They recognise that mental health fluctuates and people may occasionally require additional support or time to recover. Managers feel equipped and supported to respond appropriately and balance support for individuals with organisational needs. They genuinely engage and consult with workers.

Individuals and teams have the resources, skills, autonomy, reasonable workloads, technology and support they need to perform their roles. People are clear about what is expected of them. Communication and consultation with workers is open and respectful, and people feel connected and valued at work. Schedules, equipment and technology support mental health rather than creating stress. Time away from work is encouraged to enable people to refresh, recharge and enjoy life.

All people feel clear about their role in creating a mentally healthy workplace. This includes roles such as Health and Safety Representatives, human resources, work health and safety, wellbeing and other operational staff. There are clear ways of working together on shared challenges or processes that involve many areas of the organisation.

Interactions with customers, suppliers and contractors reflect the same commitment to protecting mental health. People feel they can be themselves at work, no matter who they are.

Appendix 6 Criteria for selection of indicators used in other Australian monitoring frameworks

Source/Title	Criteria for selection of indicators
Australian Health Performance Framework (2020) Australian Institute of Health and Welfare (2005)	▪ **Valid:** The indicator measures the phenomenon it claims to measure—it relates closely to the phenomenon or to an essential aspect/element of the phenomenon. ▪ **Relevant:** Reflecting important social issues. ▪ **Applicable across population groups:** The indicator is meaningful for the general population and for the subpopulation groups to which the topic is relevant. ▪ **Reliable:** The indicator is not likely to be influenced by variation in definitions or data collection methods in such a way that comparability over time or between sub-populations is compromised. ▪ **Sensitive:** When there is a significant change in the phenomenon of interest this will be reflected in a significant change in the indicator. ▪ **Robust:** A change in the indicator can be clearly interpreted to reflect a corresponding change in the phenomenon; the indicator is not liable to unpredictable or inexplicable fluctuations. ▪ **Readily understood:** The meaning and intent of the indicator is clear; accompanied by appropriate explanation/guidance, it can be readily understood by a general audience. ▪ **Supported by data that are currently available and/or feasible to collect:** Consistent time series data are available, or could feasibly be collected to support the indicator, such that the data can reasonably be compared over time to show trends in the phenomenon.
AIHW National Strategic Framework for Chronic Conditions (NSFCC): reporting framework (2022) Australian Institute of Health and Welfare (2022)	▪ Be relevant ▪ Be applicable across population groups ▪ Be technically sound (valid, reliable, sensitive to change over time, and robust) ▪ Be feasible to collect and report ▪ Lead to action (at various population levels, for example, individual, community, organisation/agency) ▪ Be timely ▪ Be marketable Note: The order of criteria does not indicate priority. Sources: Council of Australian Governments Health Council (2012), Australian Institute of Health and Welfare (2011) ▪ It was not anticipated that each criterion would be met for every indicator; rather, the selection criteria provided guidance for the development and continual improvement of the entire set of indicators. ▪ In addition to these criteria, two requirements were that <u>indicators should be suitable for reporting in an Australian context, and that data should currently exist to inform routine monitoring</u> and reporting.

Source/Title	Criteria for selection of indicators
Safe Work Australia National Return to Work Strategy 2020-2030: Methodology for the Measurement Framework (2019) (Safe Work Australia 2019) Guiding criteria for individual measures	**Strategic:** The measure supports the Strategy's vision and assesses a component of one of the three strategic outcomes in the Strategy. **Modifiable:** The measure can be influenced through actions described in the Strategy, within the ten-year time period. **Rational:** The measure assesses one of the four domains of the measurement model and is a lagging or leading indicator. **Good Quality:** The measure meets commonly accepted measurement standards, including being reliable, valid, understandable, specific, sensitive and relevant. **Available:** Data on the measure must be collected, or able to be collected, across multiple workers' compensation jurisdictions, and ideally nationally.
Safe Work Australia National Return to Work Strategy 2020-2030: Methodology for the Measurement Framework (2019) (Safe Work Australia 2019) Quality criteria applied to determine indicators' applicability to the national strategy	**Importance/relevance:** The indicator reflects an issue that is important in return to work and relevant stakeholders, and consistent with the intent of the Strategy and SWA's role. **Measurability:** There are data sources that can be used to measure the indicator. **Actionability:** The indicator is likely to inform and influence public policy, alter behaviour and/or increase understanding by stakeholders in order to improve return to work outcomes. **Evidence-based:** There is good evidence to support measuring and reporting on the indicator. **Feasibility:** The indicator is calculable, and data is timely. **Interpretability:** The indicator is clear and can be easily interpreted by audiences, and the results are comparable and easy to understand. **Data quality:** The indicators include data quality such as technical definition, calculation methodology, validity and reliability of measurement, and timeliness of data.
State Insurance Regulatory Authority (SIRA) NSW Government Setting the parameters of the measure (State Insurance Regulatory Authority 2021)	- All measures in the framework are based on current evidence of modifiable factors that influence an injured person's recovery at work, including both lead and lag indicators. **Purpose:** Clarify the reason for measuring an activity, payment or process and the expected outcome. **Measurement selection:** Determine which suite of measures will provide the best information to address the purpose. **Parameters:** Includes various issues e.g. cohorts, data currency (reporting period), measurement point/period (reference period), exposure period, times series, development period, lag period etc.

Appendix 7 Example of national monitoring frameworks

Source/title	Description	Indicators	Development and reporting	Structure and framework components
Australian Health Performance Framework (2020) (Australian Institute of Health and Welfare 2021)	The Australian Health Performance Framework (AHPF) is a tool for reporting on the health of Australians, the performance of health care in Australia and the Australian health system.	▪ Focuses on four domains which have a number of different factors (dimensions) and an initial set of 45 indicators which are presented at a National, State and Territory and local level (where data available). ▪ Results for some indicators are disaggregated by population subgroups, such as sex and age groups.	▪ Progressively developed with input from the sector including from Commonwealth, state and territory governments, clinicians, health consumers, and academics. ▪ Indicators are not currently available for all domains and dimensions within the AHPF framework. ▪ Enables tiered reporting.	▪ Conceptual framework ▪ Core indicators ▪ Data dashboard publicly available (see https://www.aihw.gov.au/reports-data/australias-health-performance/australias-health-performance-framework)
AIHW National Strategic Framework for Chronic Conditions (NSFCC): reporting framework (2022) (Australian Institute of Health and Welfare 2022)	The NSFCC is the overarching policy for the prevention and management of chronic conditions in Australia. It provides a nationally agreed set of performance measures which, where possible align with Australia's international reporting commitments.	▪ Contains 45 'standardised' indicators linked to three objectives. ▪ Each objective has success statements and strategic priority areas where attention should be focused. ▪ There is no single indicator to monitor progress against the NSFCC.	▪ Developed in partnership with states and territories under the auspice of the Australian Health Ministers' Advisory Council (AHMAC) including the selection criteria for indicators. ▪ Information domains relevant to monitoring chronic conditions/contextual factors to assess progress against three objectives. ▪ Indicators are mapped to each objective and success statement	▪ Objectives and success statements ▪ Indicator specifications (description and definition of indicator, rationale for its inclusion, its calculation, an indicative data source, issues associated with using the indicator, and suggested interpretation of the indicator) ▪ Data gaps: identify where further development work is required to allow for better monitoring of progresses against the NSFCC objectives. ▪ Using the reporting framework ▪ List of data sources ▪ Indicator specifications (METeOR see https://meteor.aihw.gov.au/content/181162)

Source/title	Description	Indicators	Development and reporting	Structure and framework components

		▪ Not all of the areas in the NSFCC can be measured with quantitative indicators alone. In future, it may be necessary to consider the inclusion of appropriate qualitative indicators to enhance progress monitoring against the objectives of the NSFCC.	▪ Assessment of potential disaggregation of data by priority populations provided.
			▪ Draws on Australian Health Performance Framework (AHPF).
				▪ Appendices:
				  - Expert consultation
				  - WHO targets
				  - Data sources

Australian University Mental Health Framework Report (2020)(Orygen 2020)	This framework provides guidance for mentally healthy university settings that support student mental health and wellbeing in collaboration with the mental health sector. The framework seeks to build on previous initiatives through a settings-based approach which embeds student mental health and wellbeing responses across the whole university.	▪ Stated vision with six principles that support student mental health and wellbeing. ▪ Identifies at risk student groups. ▪ Emphasis on continuous improvement and evolution the framework. ▪ The framework takes a settings based approach. ▪ The need for nationally consistent data and ongoing data collection, monitoring and reporting identified.	▪ Following the 2017 release of the Orygen report, Under the radar: the mental health of Australian university students, funding to develop an Australian University Mental Health Framework (the framework) was provided through a grant from the Australian Government Department of Health. ▪ Developed through extensive consultation with students, and university and mental health sector stakeholders. ▪ Advisory group and expert working groups contributed.	▪ Sections include, for example: ▪ Principles and associated practices to provide guidance on desired actions ▪ Taking action ▪ Next steps: sample planning matrices and self-assessment tool and self-review tool.

Source/title	Description	Indicators	Development and reporting	Structure and framework components
Disability and Wellbeing Monitoring Framework (2020) (Centre of Research Excellence in Disability and Health 2020)	The framework will be used to report baseline data for people with and without disability and to monitor inequalities over time in Australia. It will also be used to locate policy priorities and focus efforts to address data gaps.	▪ Comprised of three elements, 19 domains and 128 indicators. ▪ Australian national data are available for 73% of the 128 indicators in these domains. ▪ There are 17 topics in the framework that do not currently have indicators (either unsuitable or no relevant indicators could be identified).	▪ The development drew on existing frameworks and indicators sets with input from people with lived experience of disability. ▪ Australia's National Disability Strategy 2010 – 2020 identifies indicators within six areas for policy action and acknowledges the importance of monitoring and reporting progress. ▪ Expert Panel of advice provided input on all aspects of the framework via two rounds of consultation. ▪ Draws on Australian Health Performance Framework (AHPF) in addition to 20 existing Australian and international frameworks.	▪ Hierarchical structure at the top level are three elements, at the next level are domains which are broad groupings of information relevant to each element. Each domain has one or more topic, within which relevant indicators are specified. ▪ Identification of national data sources: Australian Census Surveys (ABS), other national surveys and administrative data collections, preference to ABS sources. ▪ Development of domains (headings) and topics (sub-headings). ▪ Development of potential indicators – from existing frameworks and indicator lists, suggested by expert panel and relevant data items from Australian national data sources. ▪ Indicator selection criteria (AIHW). ▪ Data gaps and limitations.
Mental health and suicide prevention monitoring and reporting framework (NMHC) (2018) (National Mental Health Commission 2018)	The purpose of the Framework is to enable the Commission to undertake national independent monitoring and reporting on mental health and suicide prevention. The desired outcome of monitoring and reporting is positive change in the mental health and wellbeing	▪ Desired NMHC monitoring and reporting outcome specified. ▪ At a minimum the Commission will report against the Fifth National Mental Health and Suicide Plan (Fifth Plan). ▪ Priority populations identified. ▪ Three domain categories (social, system, outcome)	▪ Three-staged methodology: ▪ Initial consultations with stakeholders and environmental scan ▪ Draft framework materials developed, national consultations ▪ Refined framework and implementation plan developed, presentation/endorsement of framework. ▪ Gradual development of specifications for most indicators from the Fifth Plan.	▪ Purpose ▪ Audiences ▪ Principles guiding NMHC approach to monitoring and reporting both 'design principles' and 'flexible reporting principles' ▪ Domains and focus domains ▪ Priority groups ▪ Monitoring and reporting formats ▪ The cycle of reporting ▪ Data sources and reporting frequency opportunities for analysis ▪ Stakeholder collaboration.

Source/title	Description	Indicators	Development and reporting	Structure and framework components
	of all Australians, enabling people to lead a contributing life and to be part of a thriving community.	which contain focus domains (28). ▪ The domains align to four reform priorities of the NMHC. ▪ Identify existence of data gaps and absence of data. ▪ Consideration of directly commissioning data development by working with data custodians, improve data linkage between different sectors and jurisdictions ▪ Use of longitudinal and cross-sectional data considered.		
Safe & Supported – The National Framework for Protecting Australia's Children 2021-2031 (2021) (Australian Government Department of Social Services 2021)	All governments are committed to the accountability measures and reporting requirements agreed to as part of Closing the Gap. Under the first National Framework, there was significant investment in developing child	▪ National strategic framework outlines vision, goal etc. ▪ Population based approach with focus on four priority groups and four focus areas. ▪ Designed to align with other national initiatives that support children, young people and families to be safe.	▪ Developed over two years of consultation. ▪ Enhanced the Child Protection National Minimum Data Set to improve data comparability across states and territories. ▪ Conducting data-linking projects to improve data collection and continuing to strengthen datasets at national level and data integration. ▪ Outcomes framework due for release 2022.	▪ Outcomes framework to guide monitoring and evaluation strategy with associated measures ▪ Priority groups ▪ Focus areas ▪ Indicators ▪ Principles ▪ Governance

Source/title	Description	Indicators	Development and reporting	Structure and framework components
	protection-related data and reporting. Intention to publicly report progress.	▪ All states and territories are delivering their own initiatives to improve outcomes for children.		
Safe Work Australia National Return to Work Strategy 2020-2030 Measurement Framework (2019) (Safe Work Australia 2019)	The Measurement Framework (the framework) outlines how Safe Work Australia will measure the success of the National Return to Work Strategy 2020-2030 (the Strategy). The framework utilises Safe Work Australia's national datasets that provide insights into workers' compensation claims and experiences.	▪ Three strategic outcomes with corresponding national measures. The measures include lagging indicators and leading indicators and span four stakeholders in the return to work process: the worker, employer, healthcare and insurer. ▪ A measurement framework model provides a conceptual framework for leading and lagging indicators. ▪ Note that there is an absence of reliable national data for some listed measures. Future data development may result in the inclusion of alternative measures and/or metrics in the framework.	▪ In 2019, Safe Work Australia Members and all Australian Work Health and Safety Ministers endorsed the Strategy. ▪ The framework was developed in partnership with governments, worker and employer representatives, informed by the national and global return to work evidence base, expert advice, and insights from various stakeholders during the development of the Strategy. ▪ Three national strategic outcomes support the vision, and outline the change expected from the Strategy's success. ▪	▪ Introduction ▪ Primary data sources ▪ National performance measures and objectives (measure, data source, domain, strategic outcome, metric, rationale, performance objective i.e. direction of change, scope for change). ▪ Reporting ▪ Reviewing the Measurement Framework

Source/title	Description	Indicators	Development and reporting	Structure and framework components
State Insurance Regulatory Authority (SIRA) Recovery through work measurement framework (2021) (State Insurance Regulatory Authority 2021)	The Recovery through work measurement framework (the framework) outlines a multifaceted approach to measure recovery, as it relates to work, for all people injured on the roads or in the workplace. SIRA's measurement framework is aligned with the national framework (National Return to Work Strategy 2020-2030).	▪ Four domains: workplace, insurer, personal and healthcare domain. ▪ Several indicators are multi-domain. ▪ Lead indicators (modifiable factors that influence whether work outcomes are achieved) ▪ Lag indicators (work outcomes) ▪ Technical details used for designing metrics (parameters) of each measure. ▪ Framework prioritises the most important modifiable factors when designing new measures.	▪ During 2020 SIRA sought stakeholder feedback about measuring RTW via responses to a discussion paper and virtual roundtable sessions.	▪ Rationale for framework ▪ Evidence ▪ Stakeholder consultation ▪ National RTW strategy and measurement framework ▪ Recovery through work measurement framework ▪ Indicators of recovery through work (lead, lag, recover through work outcome measures cube) ▪ Designing measures/indicators ▪ Principles ▪ Data and information sources ▪ Setting the parameters of the measure ▪ Catalogue of measures (measure, description, rationale/evidence) ▪ Application (reporting performance)