Value-Based Healthcare Outcomes Framework

For the NSW Workers Compensation and Motor Accident Injury/Compulsory Third Party Schemes

28 July 2021



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List of abbreviations

Table 1: List of abbreviations

Abbreviation	Definition
СТР	Compulsory Third Party
DWG	Data Working Group
ICF	International Classification of Functioning, Disability and Health
NSW	New South Wales
QoL	Quality of Life
RTA	Return to Activity
RTW	Return to Work
SIRA	State Insurance Regulatory Authority
WC	Workers Compensation
WHO	World Health Organisation

1. A framework for health outcomes at SIRA

The State Insurance Regulatory Authority's (SIRA's) legislative objectives¹ are to: minimise cost to the community of workplace injuries and injuries arising from motor accidents; promote the efficiency and viability of the NSW workers compensation (WC) and compulsory third party (CTP)² schemes; and ensure that persons injured in the workplace or in motor accidents have access to treatment that will assist in their recovery.

SIRA is committed to implementing value-based healthcare within the WC and CTP schemes. Value-based healthcare will support recovery, and improve return to activity, return to work and quality of life outcomes for people injured at work and on the road.

To determine whether value is being delivered from healthcare expenditure, health outcomes must be measured and understood. The *Value-Based Healthcare Outcomes Framework* ('the health outcomes framework', or 'the framework') is fundamental to achieving this.

This document provides an overview of SIRA's health outcomes framework, and a series of proposed metrics. SIRA considers this framework to be aspirational and that the supporting data collection, monitoring and evaluation capabilities will need to be built over time.

This document is therefore published as a statement of intent to guide further co-design and implementation. SIRA's intention is that the framework continues to evolve in partnership with scheme participants.

In July 2020, SIRA published a consultation paper on the draft framework³. This document provides a refined version of the framework, incorporating feedback from public submissions.

1.1. Purpose of the health outcomes framework

To determine whether value is being achieved from healthcare expenditure, health outcomes must be measured and understood.

The health outcomes framework underpins the delivery of value-based healthcare by providing a transparent and systematic approach to monitoring and reporting on the achievement of health outcomes consistent with SIRA's objectives.

Throughout the framework, 'health outcomes' refers to outcomes relating to both injured persons⁴ covered by the WC and CTP schemes, and the wider healthcare ecosystem in which these schemes exist (including, for example, outcomes relating to healthcare provider experience, and the cost and efficiency of healthcare).

¹ As defined by the State Insurance and Care Governance Act 2015.

² The 2017 compulsory third party (CTP) scheme, established under the Motor Accident Injuries Act 2017 (MAIA).

³ SIRA (2020), Health outcomes framework for the NSW Workers Compensation and Motor Accident Injury/Compulsory Third Party Schemes: Consultation paper (21 July 2020).

⁴ While each of the personal injury schemes uses specific terminology – 'injured workers' in workers compensation and 'injured people/persons' in compulsory third party – throughout this report, the term 'injured persons' is used to refer to individuals covered by either scheme.

"Knowing the outcomes achieved by health services is essential to being able to achieve the greatest benefit, the best patient care, from the resources used."

- Office of Health Economics⁵

The framework defines a set of outcomes to be delivered for healthcare that is provided within the personal injury schemes regulated by SIRA, and a series of aspirational metrics by which progress towards these outcomes can be measured and assessed.

The framework has been developed to support healthcare providers⁶, insurers/claim agents, employers and other participants in the healthcare ecosystem to adopt an outcomes-focused approach to support the delivery of value-based healthcare.

As regulator of these personal injury schemes and through its legislative functions, SIRA plays a key role in enabling health outcomes for injured persons. The framework is therefore also intended to support the processes and mechanisms which enable SIRA to:

- support insurers/claim agents to facilitate the delivery of value-based healthcare,
- provide information to injured persons to promote informed choices,
- promote continuous clinical improvement,
- measure population health outcomes associated with improvements in the provision of healthcare and experience of participants, and
- gather information to support supervision activity and policy.

In this way, the framework will allow scheme participants to improve their understanding of the health outcomes experienced by injured persons, measure progress towards the delivery of value-based healthcare, and determine the extent to which SIRA's legislative objectives relating to the delivery of healthcare are being achieved.

1.2. SIRA's vision for healthcare

At the heart of the framework is a vision for healthcare within the personal injury schemes which SIRA regulates. This vision drives how success is viewed and measured with respect to health outcomes.

SIRA's vision for healthcare is:

"The WC and CTP schemes assist injured persons in their recovery through value-based healthcare."

As illustrated in Figure 1, value-based healthcare is focused on achieving measurable improvements in an injured persons' meaningful health outcomes relative to the resources utilised in achieving those improvements^{7,8}. This requires targeted interventions that acknowledge the complex relationship between an injury or illness and the resultant levels of participation in life or work activities.

⁵ Chauhan D, Sussex J (2008), *NHS Outcomes, Performance and Productivity*, Monographs, Office of Health Economics, number 000244.

⁶ Expanding the health outcomes framework to explicitly reference non-clinical and social (including attendant care) providers is an area for future exploration, to be considered in the context of SIRA's value-based healthcare transformation.

⁷ Porter ME, Teisberg EO (2006), *Redefining Health Care: Creating Value-Based Competition on Results.* Boston, MA: Harvard Business School Press.

⁸ Teisberg E, Wallace S and O'Hara S (2020), *Defining and Implementing Value-Based Health Care: A Strategic Framework*, Academic Medicine, 95(5), 682-685.

Figure 1: Overview of value-based healthcare9



The definition of value-based healthcare used in the framework is consistent with the principles and definitions set out by NSW Ministry of Health¹⁰. This includes the four essentials of value known as the *Quadruple Aim*¹¹ for delivery of healthcare that improves:

- health outcomes that matter to patients,
- experiences of receiving care,
- · experiences of providing care, and
- effectiveness and efficiency of care.

Figure 2 outlines the ways in which a value-based approach to healthcare supports SIRA's legislated purpose in relation to the personal injury schemes.

⁹ Adapted from Porter M, et al. (2014), *Value-Based Health Care Delivery*, Available at: https://www.hbs.edu/faculty/Publication%20Files/3_13615129-eeec-4987-bfla-1261ff86ae69.pdf.

¹⁰ NSW Ministry of Health (2019), *Value based healthcare*, Available at: https://www.health.nsw.gov.au/Value.

¹¹ An extension of the Institute for Healthcare Improvement (IHI) Triple Aim (Available at: http://www.ihi.org/Engage/Initiatives/TripleAim).

What is the purpose of SIRA's personal injury schemes?

From the State Insurance and Care Governance Act 2015 (selected for relevance):

- To promote workplace injury prevention, effective injury management and return to work measures and programs
- To promote the efficiency and viability of the insurance and compensation schemes established under the workers compensation and motor accidents legislation and the other Acts under which SIRA exercises functions
- To minimise the cost to the community of workplace injuries and injuries arising from motor accidents and to minimise the risks associated with such injuries

From the Workplace Injury Management and Workers Compensation Act 1998 (selected for relevance):

 To provide prompt treatment of injuries, effective and proactive management of injuries, and necessary medical and vocational rehabilitation following injuries, in order to assist injured workers and to promote their return to work as soon as possible

From the Motor Accidents Injuries Act 2017 (selected for relevance):

 To encourage early and appropriate treatment and care to achieve optimum recovery of persons from injuries sustained in motor accidents and to maximise their return to work or other activities

How does a value-based approach to healthcare support this purpose?

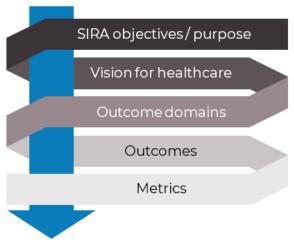
- Timely access to appropriate healthcare (i.e. right care, right place at the right time)
- Delivery of healthcare that is high quality and safe
- Evidence-based care pathways and clinical frameworks
- Improved patient outcomes (e.g. improved health-related quality of life, improved physical function, improved mental health outcomes, etc.)
- Increased health literacy to support informed and evidence-based patient choice for care
- Integrated care across patient settings and multidisciplinary providers
- Achievement of outcomes aligned with the pillars of the Quadruple Aim of Healthcare (see definition above)

1.3. Structure of the health outcomes framework

The framework starts with SIRA's **objectives** in relation to the schemes, which provide context for the vision for healthcare. The **vision for healthcare** is divided into outcome **domains**, each containing a set of **outcomes** defining success for healthcare provided within the schemes. Individual **metrics** then provide quantitative measures of progress against each of these outcomes¹².

The structure of this framework is depicted in Figure 3.

Figure 3: Structure of the health outcomes framework



Outcome domains

Domains are the headline, or principal areas into which the individual outcomes are organised. They represent the key dimensions of the vision for healthcare in the WC and CTP schemes.

Outcomes

Outcomes are statements that define success in relation to driving valuebased healthcare in the personal injury schemes regulated by SIRA.

Metrics

Metrics are measurable quantities by which progress towards the related outcomes can be assessed. They represent the extent to which the outcomes have been or are being achieved, providing a measure of success.

The components of the framework are supported by:

- **Purpose statement** A statement of the vision for healthcare in the WC and CTP schemes, and a description of the intended purpose of the framework.
- Implementation plan A high-level implementation plan for building capability in measuring and driving improvement in health outcomes through application of the framework.
- **Plan for engagement and co-design** A plan for further engagement and co-design with scheme participants to agree metrics, refine the implementation approach, and determine roles and responsibilities for the implementation and application of the framework.

SIRA's intention is that the health outcomes framework continues to evolve in partnership with scheme participants under a value-based healthcare approach. This will include the development of additional metrics as capability is built in the areas of data collection, monitoring and evaluation.

¹² Quantitative measures may be complemented with insights from qualitative sources (for example, clinical notes) as part of targeted investigations and evaluations. See *Section 3.1.1* for further information on the research, evaluation and experience investigation process.

2. Defining and measuring success in achieving health outcomes

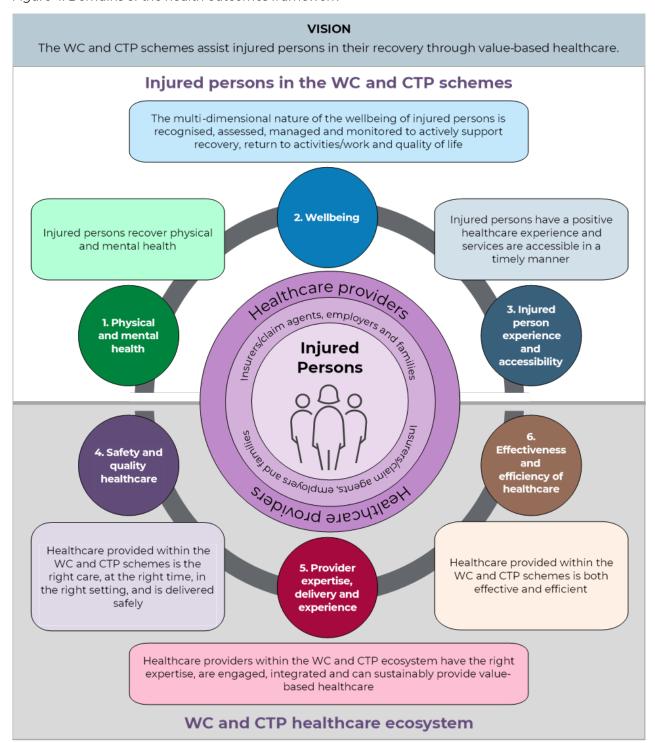
2.1. What are the domains?

In SIRA's health outcomes framework, success is defined through clearly articulated health outcomes that are organised into six domains.

Each domain addresses a key dimension of achieving the vision of value-based healthcare. The domains are structured by those relating to the injured person, and those to the wider healthcare ecosystem in which the personal injury schemes regulated by SIRA exist.

Figure 4 provides an overview of the framework.

Figure 4: Domains of the health outcomes framework



The health outcomes framework is headlined by the vision to assist injured persons in their recovery through value-based healthcare.

SIRA is responsible for regulating the WC and CTP schemes, rather than providing, or making decisions relating to healthcare services for individual injured persons. Accordingly, this vision will be achieved in partnership with the insurers/claim agents, employers and families who provide a primary interface between SIRA, the injured person and the healthcare ecosystem. This is further supported by the healthcare providers who SIRA may influence either directly (for example, through approval mechanisms in the WC scheme) or indirectly (for example, via insurers/claim agents, employers, health regulators and peak bodies, and through monitoring and reporting activities).

The vision is enabled by the six surrounding domains that reflect the areas in which SIRA intends to measure and monitor outcomes that support progress towards this vision.

Each domain describes an area of health outcomes for either the injured person, or the healthcare ecosystem more broadly. Specifically:

- 1) **Physical and mental health** Injured persons recover physical and mental health.
- 2) **Wellbeing** The multi-dimensional nature of the wellbeing of injured persons is recognised, assessed, managed and monitored to actively support recovery, return to activities/work and quality of life.
- 3) **Injured person experience and accessibility** Injured persons have a positive healthcare experience and services are accessible in a timely manner.
- 4) **Safety and quality of healthcare** Healthcare provided within the WC and CTP schemes is the right care, at the right time, in the right setting, and is delivered safely.
- 5) **Provider expertise, delivery and experience** Healthcare providers within the WC and CTP ecosystem have the right expertise, are engaged, integrated and can sustainably provide value-based healthcare.
- 6) **Effectiveness and efficiency of healthcare** Healthcare provided within the WC and CTP schemes is both effective and efficient.

2.2. What are the desired health outcomes?

Within each domain, the health outcomes framework defines a set of outcomes that collectively define success in relation to achieving that aspect of SIRA's vision for healthcare.

These outcomes reflect the desired improvements in:

- physiology, functioning, activity participation and quality of life for injured persons;
 and
- quality, effectiveness, efficiency and experience for the WC and CTP schemes and participants in their healthcare ecosystems.

Defining these outcomes is intended to support ongoing planning, evaluation and response activities. This will provide greater clarity on SIRA's objectives relating to health outcomes, and improved transparency and accountability, contributing to more effective supervision and regulation.

Table 2 provides an overview of the desired outcomes across the six domains, including a mapping of each outcome to the pillars of the *Quadruple Aim*.

Domains

Outcomes



1. Physical and mental health

Injured persons recover physical and mental health

- 1.1 Physical and mental health is improved or maintained
- 1.2 Functioning is improved or maintained
- 1.3 Towards zero harmful dependence on healthcare



2. Wellbeing

The multi-dimensional nature of the wellbeing of injured persons is recognised, assessed, managed and monitored to actively support recovery, return to activities/work and quality of

- 2.1 Holistic wellbeing is taken into account
- 2.2 Return to activities/work in an appropriate time period
- 2.3 Injured persons have a sense of self-efficacy
- 2.4 Social and environmental factors are considered to support return to activities/work and quality of life
- 2.5 Injured persons actively participate in their own recovery



3. Injured person experience and accessibility

Injured persons have a positive healthcare experience and services are accessible in a timely manner

- 3.1 Healthcare is accessible in the right place, at the right time
- 3.2 Healthcare is inclusive and responsive
- 3.3 Healthcare is integrated
- 3.4 Satisfaction with the healthcare experience
- 3.5 Satisfaction with the claims experience where it is related to healthcare



4. Safety and quality of healthcare

Healthcare provided within the WC and CTP schemes is the right care, at the right time, in the right setting, and is delivered safely

- 4.1 Healthcare is person-centred and high quality
- 4.2 Low value healthcare is minimised
- 4.3 Healthcare reflects innovative leading practice
- 4.4 Healthcare is delivered safely
- 4.5 Healthcare is driven by information



5. Provider expertise, delivery and experience

Healthcare providers within the WC and CTP ecosystem have the right expertise, are engaged, integrated and can sustainably provide value-based healthcare

- 5.1 Providers have the right expertise
- 5.2 Provider wellbeing, engagement and satisfaction is improved or maintained
- 5.3 Providers integrate and collaborate
- 5.4 Providers exhibit value-based behaviours



6. Effectiveness and efficiency of healthcare

Healthcare provided within the WC and CTP schemes is both effective and efficient

6.1 Healthcare is cost and resource efficient in delivering outcomes

KEY: Alignment with the pillars of the Quadruple Aim for delivery of healthcare



Improved health outcomes that matter to patients



Improved experiences of receiving care



Improved experiences of providing care



Improved effectiveness and efficiency of care

Each outcome is intended to benefit specific stakeholder groups. A detailed description of each outcome and the primary target beneficiaries¹³ is captured in Table 3 below.

¹³ It should be noted that secondary benefits are expected throughout the ecosystem. For example, active participation in recovery benefits the injured person primarily, but could flow on to lower claims costs and therefore lower premiums.

1. Physical and mental health

Injured persons recover physical and mental health



Physical and mental health is improved or maintained 1.1

Target beneficiary

The physical and mental health of injured persons covered by the WC and CTP schemes • Injured persons is improved or maintained across the biopsychosocial spectrum.

Functioning is improved or maintained

Target beneficiary

The activity or work-related level of functioning of injured persons covered by the WC and CTP schemes is improved or maintained, and is reflective of their degree of physiological limitation, if any.

· Injured persons

Towards zero harmful dependence on healthcare 1.3

Target beneficiary

Harmful dependency on healthcare is minimised or avoided, including avoiding ongoing reliance on, unnecessary, misdirected or potentially harmful treatment and care

· Injured persons

2. Wellbeing

The multi-dimensional nature of the wellbeing of injured and monitored to actively support quality of life



Target beneficiary

The multi-dimensional nature of the wellbeing of injured persons covered by the WC and CTP schemes is considered by identifying and measuring biopsychosocial complexity.

· Injured persons

Return to activities/work in an appropriate time period 2.2

· Injured persons

Injured persons covered by the WC and CTP schemes achieve recovery milestones, and return to activities/work in an appropriate time period, given their identified biopsychosocial complexity.

Employers

2.3 Injured persons have a sense of self-efficacy

Target beneficiary

Target beneficiary

Injured persons covered by the WC and CTP schemes have a sense of self-efficacy, are personally empowered, actively engaged and effectively supported by their healthcare providers, insurers/claim agents and employers (where applicable) in pursuing return to activities, return to work and/or quality of life outcomes. This includes influencing behaviours that may impact effective engagement in the return to activities/work process.

· Injured persons Employers



Social and environmental factors are considered to support return to activities/work and quality of life

Target beneficiary

Social and environmental factors are considered and optimised to support return to activities, return to work and/or quality of life.

· Injured persons Employers

2.5 Injured persons actively participate in their own recovery

Target beneficiary

Injured persons take an active role in their healthcare, in partnership with their healthcare providers, insurers/claim agents and employers (where applicable).

· Injured persons

3. Injured person experience and accessibility

Injured persons have a positive healthcare experience and in a timely manner



Healthcare is accessible in the right place, at the right 3.1

Target beneficiary

Injured persons covered by the WC and CTP schemes are able to effectively navigate across the continuum of integrated healthcare services, and access timely, evidencebased treatment and care in an appropriate setting given their circumstances.

Injured persons

Healthcare is inclusive and responsive

Target beneficiary

The provision of healthcare services is inclusive and reflects the choice, culture, identity, • Injured persons circumstances and goals of the individual.

Healthcare is integrated

Target beneficiary

The provision of healthcare services is integrated across the continuum of need. Transitions between types of care, disciplines and/or providers are effectively facilitated and managed to enable continuity of care.

· Injured persons

Providers

Providers

Satisfaction with the healthcare experience

Injured persons and their families/carers feel satisfied with the end-to-end healthcare experience within the WC and CTP schemes.

Target beneficiary Injured persons

Satisfaction with the claims experience where it is related 3.5 to healthcare

Target beneficiary

Injured persons and their families/carers feel satisfied with the end-to-end claims experience associated with accessing healthcare services within the WC and CTP schemes, including dispute resolution processes.

· Injured persons

 Insurers/claim agents

4. Safety and quality of healthcare

Healthcare provided within the WC and CTP schemes is the right care, at the right time, in the right setting, and is delivered safely



4.1 Healthcare is person-centred and high quality

Healthcare is person-centred, of the appropriate intensity given needs, delivered within • Injured persons clinical guidelines and evidence-based practice, and informed by and matched to individual-level assessment and outcome measures.

Target beneficiary

Low value healthcare is minimised

Healthcare provided in the WC and CTP schemes avoids ineffective, wasteful, unnecessarily invasive or misdirected healthcare, limiting avoidable progression of conditions.

Target beneficiary

· Injured persons

4.3 Healthcare reflects innovative leading practice

Healthcare provided in the WC and CTP schemes considers and appropriately reflects innovative leading practice.

Target beneficiary

· Injured persons Providers

Healthcare is delivered safely 4.4

The occurrence of serious incidents and preventable adverse events during the delivery • Injured persons of healthcare is minimised or avoided.

Target beneficiary

Healthcare is driven by information 4.5

Health information and data is routinely collected, reported and used to drive and support value-based healthcare activities within the WC and CTP schemes (in accordance with applicable legislation).

Target beneficiary

· Injured persons · Providers

5. Provider expertise, delivery and experience

Healthcare providers within the WC and CTP ecosystem have the right expertise, are engaged, integrated and can sustainably provide value-based healthcare



5.1 Providers have the right expertise

The healthcare ecosystem is able to attract, reward and retain healthcare providers with • Injured persons the right expertise that best support and continually improve value-based healthcare provided to all injured persons covered by the WC and CTP schemes, including in regional areas and thin markets.

Target beneficiary

- Providers

Provider wellbeing, engagement and satisfaction is 5.2 improved or maintained

The wellbeing, engagement and satisfaction of the healthcare provider workforce is effectively managed and supported, empowering and enabling them to deliver valuebased healthcare services in sustainable ways.

Target beneficiary

· Injured persons Providers

Providers integrate and collaborate 5.3

Healthcare providers within the WC and CTP schemes integrate and collaborate to effect value-based healthcare outcomes for injured persons. Knowledge sharing mechanisms facilitate the coordination, access, design and delivery of high value care.

Target beneficiary

· Injured persons Providers

Providers exhibit value-based behaviours

Healthcare providers within the WC and CTP schemes exhibit desirable behaviours consistent with value-based healthcare principles, including measuring outcomes for all injured persons, and acknowledging the balance between benefits, costs and resource use.

Target beneficiary

- Injured persons Schemes
- · Insurers/claim agents

Effectiveness and efficiency of healthcare

effective and efficient



Healthcare is cost and resource efficient in delivering 6.1

The provision and administration of healthcare is cost and resource efficient, optimising • Injured persons health outcomes relative to the costs incurred and resources utilised in achieving these outcomes. This includes avoiding duplicative, wasteful and unnecessary activities and leakage.

Target beneficiary

- Schemes
- Insurers/claim agents
- Providers

2.3. What are the metrics?

The health outcomes framework aims to provide guidance and a structure to measure progress towards and achievement of health outcomes through a series of quantifiable metrics.

As SIRA is in the early stages of co-designing its value-based healthcare transformation, not all aspects of the framework are readily quantifiable. Accordingly, this document contains a list of aspirational metrics. SIRA plans to partner with the sector to validate and further co-design the proposed metrics to support the framework.

It is anticipated that these metrics will continue to evolve as SIRA progresses through its value-based healthcare transformation, and in response to feedback from the sector, future refinements to the framework, as well as advances in the availability of data.

A roadmap for the implementation of the health outcomes framework and the development of metrics is provided in *Section 4 – Implementation plan for the health outcomes framework*. This section also contains a series of proposed metrics for the first implementation horizon, and proposed priority metrics across future horizons.

SIRA intends to continue to collaborate with the sector to refine the metrics presented in the document. A plan for engaging with the sector to finalise the metrics and roles and responsibilities in included in Section 5 – Plan for engagement and co-design.

3. How the health outcomes framework will be used

Applying the framework across the design, delivery and evaluation of healthcare services will facilitate a better understanding of the extent to which these services support the recovery, return to activity, return to work and quality of life for injured persons, and therefore the extent to which expenditure on healthcare in the schemes is delivering value.

SIRA's intention is that the health outcomes framework is applied for the purposes described below.

Table 4: Potential applications of the health outcomes framework

Application	Description
Service design	By building a common understanding of the desired health outcomes for injured persons and the broader healthcare ecosystem, the framework will guide targeted and collaborative service design under a value-based healthcare approach. Furthermore, a focus on outcomes for injured persons will encourage innovative service design.
Assessment and case planning	By encouraging the assessment and acknowledgement of the breadth of factors that may impact an injured person's recovery and achievement of health outcomes, the framework will promote risk stratification and segmentation, targeted case planning, and equitable access to healthcare interventions matched to needs.
Service delivery	By providing a mechanism to distinguish between high and low value care, the framework will guide and support all participants in the healthcare ecosystem in adopting an outcomes-focused approach to service delivery.
Monitoring, research, evaluation and experience investigation	By identifying metrics to support the desired outcomes, and a maturity journey to build the capabilities required to embed these metrics, the framework will promote consistency of measurement and evaluation of healthcare services. The focus will be on achievement of health outcomes that matter to injured persons. This will allow stakeholders to conduct monitoring, research, evaluation and experience investigation activities, to identify opportunities for improvement.
Performance management	By articulating SIRA's expectations for the achievement of health outcomes for injured persons and the broader healthcare ecosystem, the framework will support other regulatory tools as a basis for outcomes-focused supervision and performance management activities.
Continuous improvement	By increasing transparency of the health outcomes experienced by injured persons within SIRA's personal injury schemes, the framework will foster innovation, learning and continuous improvement among healthcare providers, insurers/claim agents, employers and other participants in the healthcare ecosystem.

All stakeholders within the WC and CTP schemes are encouraged to consider additional applications of the framework within their own context.

3.1. Examples of how the health outcomes framework can be applied in practice

3.1.1. The research, evaluation and experience investigation process

It is expected that the health outcomes framework, and associated monitoring and reporting approaches, will be enhanced and refined over time. This will be achieved through an iterative process of research, evaluation and experience analysis, including consultation with SIRA's internal and external stakeholders.

Each metric supporting the health outcomes framework can be categorised into one or more of the following classifications:

- Individual assessment and monitoring Where a metric is expected to be collected at (or prior to) the time of injury or claim, to be used in the assessment and triage of an injured person to ensure appropriate case planning and access to healthcare that meets their individual needs.
- **Portfolio-level monitoring and reporting** Where a metric is expected to be captured and reported on at regular time intervals, such as monthly, quarterly, or yearly. Because of the consistent nature of their reporting, these metrics can be presented in a reporting dashboard to allow for monitoring of outcomes at the portfolio level.
- Research, evaluation and experience investigation Where a metric is captured on a less frequent basis but has applications in one or more of the areas listed below.
 - Research Metrics used to investigate new trends or to test hypotheses.
 Research relates to exploratory analysis as part of a defined project which may include one off data collection.
 - Evaluation Metrics to be used to understand the impact of a change to services, processes and/or policies, and assess whether this impact is in line with expectations or desired outcomes. Metrics may be collected and reported on at key intervals over a defined evaluation period (for example, over a three-year evaluation period, with data collected at key points in time).
 - Experience investigation Metrics that enable a deep dive into a more specific topic or trend deemed to be of high priority at the time of investigation. The metrics are typically more suited to ad-hoc or semi-frequent collection and reporting.

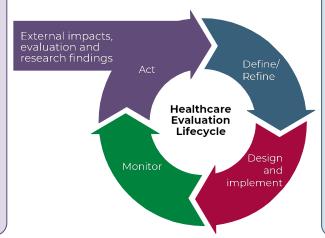
As research, evaluation and experience investigation exercises enable participants within the personal injury schemes to increase their understanding of the underlying factors which influence the achievement of health outcomes, the health outcomes framework and supporting metrics will be enhanced.

Figure 5 illustrates the continual evaluation process that will guide the further refinement and development of the health outcomes framework, and inform future policy, service and process design more broadly.

Figure 5: Healthcare evaluation lifecycle

Act

- Where appropriate, potential actions may include:
 - Policy, service or process re-designRegulatory action
 - Modifications to the health outcomes framework
 - Further research, evaluation and experience investigations
- Direct intervention based on findings



Define/refine

- Define and refine outcomes being sought and appropriate metrics to understand achievement
- Consider addition, replacement or removal of existing metrics based on (i) experience, evaluation and research findings, and (ii) availability of data
- Investigate feasibility of new metrics, with consideration of data collection methodology, implementation requirements and potential unintended consequences

Monitor

- Collect data and report regularly
- Investigate outliers or unexpected observations in regular reporting
- Consider the need for deep dive investigations

Design and implement

- Design and build new data collection mechanisms to support new metrics
- Update reporting tools and outputs to incorporate changes to metrics

Throughout the evaluation process, consideration must be given to when and how to engage with both internal and external stakeholders.

3.1.2. Informing assessment, case planning and matched service delivery

The health outcomes framework reflects a combined health and wellbeing approach that acknowledges and targets the breadth of factors that may impact an injured person's recovery.

Healthcare providers may use the health outcomes framework as part of an individual assessment process. The outcomes framework provides a structure and proposed metrics to acknowledge and measure needs relating to body system or structure physiology, functional limitation and participation in life or work activities¹⁴, in line with a biopsychosocial approach.

Assessment of individual needs in these areas will allow healthcare providers to target services to best support recovery, and achievement of return to activity, return to work and quality of life outcomes.

Systematically measuring and monitoring needs relating to body system physiology, functional limitation and activity participation is crucial to the ability to deliver matched care under a value-based healthcare approach. Routine measurement of these needs will create new sources of data aligned to the health outcomes framework, which will allow additional metrics to be implemented in regular monitoring and reporting activities. In turn, this will increase capability in measuring progress towards, and achievement of, health outcomes.

¹⁴ In line with the World Health Organisation's (WHO's) International Classification of Functioning, Disability and Health (ICF): physiology and physiological needs reflects 'impairment' as it refers to a problem with a body part structure or function; functional limitation reflects 'disability' as it refers to the consequences of the 'impairment' as they relate to execution of tasks; and 'activity participation' refers to the subsequent degree of involvement (or not) in life and/or work activities.

Source: World Health Organization (2001), *International Classification of Functioning, Disability and Health*, World Health Organization, Geneva.

4. Implementation plan for the health outcomes framework

4.1. SIRA's healthcare transformation journey

Defining the health outcomes framework is an initial step towards achieving the vision for healthcare within the WC and CTP schemes. The framework also provides a basis for which incremental changes can be made to progress towards the long-term vision of providing value-based healthcare.

Figure 6 outlines three future horizons to guide a phased value-based healthcare transformation. These implementation horizons represent iterative and sustainable shifts, in which SIRA will partner with and support stakeholders to build capability against agreed milestones for the value-based healthcare transformation.

For each horizon, the figure outlines the key milestones for SIRA's value-based healthcare transformation, the objective, and the key actions which must be taken to implement the health outcomes framework. The target timeframe for each horizon will be developed as the scope of the transformation is further refined.

As part of the co-design process (described in Section 5 – Plan for engagement and co-design), SIRA will partner with scheme participants to refine this implementation approach.

Horizon 1: Transparency on outcomes and costs

Build capability to understand the progress and achievement of health outcomes and the drivers of expenditure for the personal injury schemes, underpinned by a health outcomes framework

Objective

A transparent and systematic

approach to monitoring and

reporting on value for outcomes

Horizon 2: Collaboration and coordination around injured persons

- Re-envisage service delivery to coordinate services around injured persons and their conditions and needs
- Incrementally test new ways of coordinating service provision to achieve better outcomes

Horizon 3: Sustainable value-based healthcare policy and practices

- Shift from volume- to valuebased healthcare
- Ongoing research and evaluation used to inform continuous improvement

Service delivery approaches which drive improvements in health and wellbeing through collaboration and coordination

Objective

Objective

A sustainable end-to-end valuebased healthcare model embedded across the personal injury schemes

Complete

- Public consultation on outcomes framework
- Finalise metric definitions for inclusion in first iteration of SIRA's health outcomes dashboard, and develop dashboard

Ongoing

- Establish governance structure for implementation of outcomes framework (including ethics and a data governance framework)
- Engage key stakeholders to co-design metrics, refine the implementation approach, and agree roles and responsibilities for implementation and application of the framework
- Develop education and training material to support implementation of the framework (including guidelines and procedures)
- Identification and/or calculation of benchmarking and baselines, where required

- Explore opportunities to standardise, automate and integrate data collection
- Expand data collection and reporting on defined metrics (including, for example, new surveys, system enhancements and Commonwealth and State health data linkage)
- Identify key issues relating to the achievement of health outcomes for research. evaluation and/or experience investigation
- Develop and deploy a research, evaluation and/or experience investigation plan for key issues
- Identify potential scheme changes and opportunities for improvement within the health ecosystem based on findinas
- Ongoing monitoring and reporting of health outcomes
- Review and refinement of the framework (as required)

- Ongoing expansion of data collection and reporting on metrics as defined in the framework
- Ongoing development and deployment of research, evaluation and/or experience investigation aligned to the framework
- Identify and pursue broader opportunities to co-design and implement outcomesfocused approaches in line with SIRA's value-based healthcare transformation, for example:
 - service design and delivery arrangements featuring broader wellbeing, nonclinical and social prescription services and supports
 - value-based funding model/s
- Ongoing monitoring and reporting of health outcomes
- Review and refinement of the framework (as required)

SIRA's intention is to initially use outcomes measurement and reporting to facilitate conversations with scheme participants regarding opportunities for continuous improvement.

In the short-term (Horizon 1), understanding of the current state of health outcomes will be improved by providing transparency and consistency in the reporting of health outcomes across the personal injury schemes. This will be enabled through the development of the first iteration of a health outcomes reporting dashboard.

In the mid-term (Horizon 2), enhanced monitoring and understanding of healthcare outcomes will be achieved through the integration of additional data sources (including external sources) into SIRA's monitoring and reporting approaches, and by undertaking

research, evaluation and experience investigations to identify potential scheme changes and opportunities for improvement within the health ecosystem. As scheme participants continue to enhance their data collection and reporting capabilities, the proposed health outcomes reporting dashboard will be further developed and refined. This will be supported by efforts to standardise, automate and integrate data collection.

Finally, over the longer-term (Horizon 3), a shift towards value-based healthcare can be achieved through an ongoing process of monitoring, research, evaluation and experience investigations, and by pursuing broader opportunities to co-design and implement outcomes-focused approaches in line with SIRA's value-based healthcare transformation (for example, service design and value-based funding models).

Alongside this effort, SIRA will work with scheme participants to ensure integration of the framework at a scheme level, including components of the insurance value chain such as pricing and risk selection, claims and injury management, dispute management, customer experience, performance and compliance.

4.2. Phasing of the design and implementation of metrics underpinning the outcomes

The design and implementation of metrics to support the measurement of success against the health outcomes framework will follow a phased approach.

Measuring success in achieving the vision of value-based healthcare will require scheme participants to capture, analyse and report new sources of data and information. SIRA recognises the need to partner with and support stakeholders to build capability in these areas.

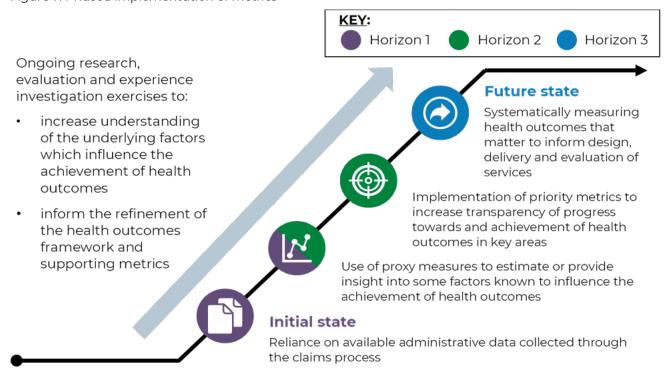
Initially, some outcomes defined in the framework may only be able to be assessed using proxy measures¹⁵, while others may not be able to be reliably measured at all. Accordingly, a series of proposed metrics have been developed to illustrate the types of data and information that will be required to move towards a value-based healthcare approach within the schemes.

The phased approach to move from a reliance on administrative data to systematically measuring health outcomes is illustrated in Figure 7. The timeframe for moving through these stages will vary by outcome, based on how the metrics are sequenced across the implementation horizons.

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¹⁵ A proxy measure is an indirect measure of the desired outcome which is itself strongly correlated to that outcome. Proxy measures are commonly used when direct measures of the outcome are unobservable and/or unavailable.

Figure 7: Phased implementation of metrics



Proposed metrics have been developed for each implementation horizon, with the focus being placed on metrics to support the first horizon of the value-based healthcare transformation.

The proposed metrics for the first horizon represent those that are most feasible to implement, based on the availability of data. While these metrics will increase transparency for many of the outcomes defined in the framework, other metrics will provide richer insights to drive the achievement of health outcomes. For this reason, the proposed metrics have been prioritised based on their expected ability to support an outcomesfocused approach in service design, delivery and evaluation.

Table 5 summarises the metrics against each outcome that are proposed for Horizon 1.

The proposed priority metrics across the three implementation horizons are included in Table 6 below. These metrics have been included to illustrate the types of information SIRA intends to utilise in the future state.

The metrics included throughout this document are preliminary only, subject to further refinement in line with the approach described in Section 5 – Plan for engagement and codesign. How these metrics will be used over time will also be determined during the consultation process.

4.3. Proposed metrics for Horizon 1 of the value-based healthcare transformation

The metrics that are proposed for Horizon 1 are included in Table 5 below. These metrics represent those that are most feasible to implement, based on the availability of data.

The legend below illustrates the status of availability of data for each metric, ranging from the required data not being collected through to the metric already being in place.

Data sources considered include:

- Datasets that SIRA currently collects,
- Additional clinical data including hospital data,
- Data from surveys currently being implemented, and
- Additional data which may be collected due to system enhancements and changes to data specifications.

Table 5: Proposed Horizon 1 metrics

Data is available to SIRA

omain	Outcome	Proposed Metric	Required Data/Availabili	Implementation ty Considerations
Physical nd mental ealth	1.1 Physical and mental health is improved or maintained	•1.1.13 Distribution of gain/loss in perceived overall health of injured persons prior to the injury and at time of survey (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Custome Experience and Outcome Study Results only available for a representative sample of injured persons in the WC and CTP schemes
eaitri	1.2 Functioning is improved or maintained	1.2.5 Distribution of the extent to which injured persons indicate they experience problems doing their usual activities (self-reported)	• Injured person survey	Based on SIRA Regulatory Measurement of Custome Experience and Outcome Study Results only available for a representative sample of injured persons in the WC and CTP schemes
	1.3 Towards zero harmful dependence on healthcare	•1.3.2 Proportion of injured persons currently prescribed opioids for more than one month (or 7 or more prescriptions in the previous 12 months)	• Administrative claims data (pharmacy payments for opioids, claimed condition)	Requires adequate coding of pharmacy payments for opioids
		1.3.3 Proportion of injured persons currently prescribed ongoing opioids without a current medication management plan	• Administrative claims data (pharmacy payments for opioids, medication management review, claimed condition)	Requires adequate coding of pharmacy payments for opioids, and medication management reviews
		•1.3.5 Proportion of injured persons currently prescribed benzodiazepines for more than 2 weeks	t	Requires adequate coding of pharmacy payments for benzodiazepines

Metric already in place

soon

Domain	Outcome	Proposed Metric	Required Data/Availability	Implementation Considerations		
1. Physical and mental health	1.3 Towards zero harmful dependence on healthcare	•1.3.6 Proportion of injured persons currently prescribed ongoing benzodiazepines without a current medication management plan	• Administrative claims data (pharmacy payments for benzodiazepines, medication management review, claimed condition)	Requires adequate coding of pharmacy payments for benzodiazepines, and medication management reviews		
		•1.3.7 Proportion of injured persons currently prescribed a combination of opioids and benzodiazepines	• Administrative claims data (pharmacy payments for opioids and benzodiazepines, claimed condition)	Requires adequate coding of pharmacy payments for opioids and benzodiazepines		
		1.3.9 Proportion of injured persons currently prescribed ongoing medicinal cannabis without a current medication management plan	• Administrative claims data (pharmacy payments for medicinal cannabis, medication management review, claimed condition)	Requires adequate coding of pharmacy payments for medicinal cannabis, and medication management reviews		
2. Wellbeing	2.2 Return to activities/work in an appropriate time period	•2.2.6 % actual RTA/RTW rate •2.2.8 % injured persons certified as having capacity to stay at work	Administrative claims data Administrative claims data	Consistency with the RTW Measurement Framework Requires data capture and management strategy Consistency with the RTW Measurement Framework		
		•2.2.9 Stay at work rate as a proportion of injured persons certified as having capacity to stay at work	• Administrative claims data	Requires data capture and management strategy Consistency with the RTW Measurement Framework		
		• 2.2.12 Distribution of injured persons who have returned to work and/or their main activity at any time since their injury (self-reported)	• Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes		
	2.3 Injured persons have a sense of self- efficacy	• 2.3.5 Distribution of recovery expectations of injured persons (self- reported)	• Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes		
KEY:		Data collected by	ut notData	a is partially available to		
Data not o		available to SIRA	U SIRA	or will be available		
Data is ava	Data is available to SIRA Metric already in place soon					

Domain	Outcome	Proposed Metric	Required Data/Availabi	lity	Implementation Considerations
2. Wellbeing	2.4 Social and environmental factors are considered to support return to activities, return to work	•2.4.6 % injured persons reporting have an RTW plan	• Injured person survey	•	Based on the National Return to Work Survey (every two years) Results only available for a representative sample of injured persons in the WC schemes
	and/or quality of life	• 2.4.7 % injured persons reporting their employer did what they could to support them	• Injured person survey	•	Based on the National Return to Work Survey (every two years) Results only available for a representative sample of injured persons in the WC schemes
		•2.4.8 % injured persons reporting they had been contacted by a person dedicated to coordinate their RTW process	• Injured person survey	•	Based on the National Return to Work Survey (every two years) Results only available for a representative sample of injured persons in the WC schemes
		•2.4.9 % injured persons reporting the experience with a designated RTW coordinator were stressful	• Injured person survey		Based on the National Return to Work Survey (every two years) Results only available for a representative sample of injured persons in the WC schemes
3. Injured person	3.1 Healthcare is accessible in the right place, at the right time	• 3.1.2 % injured persons who perceive their healthcare is accessible, in the right place and at the right time	• Injured person survey	0	Requires survey platform, development, data capture and management Opportunities to incorporate with SIRA's Regulatory Measurement of Customer Experience and Outcomes Study
experience and accessibility		• 3.1.3 Distribution of the extent to which injured persons agree they were able to easily access the medical treatment or services needed for their injury (self-reported)	• Injured person survey	•	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
	3.2 Healthcare is inclusive and responsive	•3.2.1 % injured persons who perceive their healthcare is inclusive and responsive	• Injured person survey	0	 Requires survey platform, development, data capture and management Opportunities to incorporate with SIRA's Regulatory Measurement of Customer Experience and Outcomes Study
	3.4 Satisfaction with the healthcare experience	•3.4.1 Distribution of level of satisfaction with the healthcare experience	• Injured person survey	0	Requires survey platform, development, data capture and management Opportunities to incorporate with SIRA's Regulatory Measurement of Customer Experience and Outcomes Study
KEY:	collected	Data collected b	/ 🖪		is partially available to
	ailable to SIRA	available to SIRA Metric already in		SIRA soon	or will be available

	Outcome	Proposed Metric	Required Data/Availability	Implementation Considerations
3. Injured person experience	3.4 Satisfaction with the healthcare experience	• 3.4.2 Distribution of the extent to which injured persons agree their healthcare providers helped with their recovery (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
and accessibility	3.5 Satisfaction with the claims experience where it is related to healthcare	•3.5.1 Distribution of level of satisfaction with the claims experience where it is related to healthcare	•Injured person survey	 Requires survey platform, development, data capture and management Opportunities to incorporate with SIRA's Regulatory Measurement of Customer Experience and Outcomes Study
		•3.5.2 Distribution of the extent to which injured persons agree their insurer/claims agent was efficient and easy to engage	• Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
		•3.5.3 Distribution of the extent to which injured persons agree their insurer/claims agent acted fairly, with empathy and respect (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
		•3.5.4 Distribution of the extent to which injured persons agree their insurer/claims agent resolved concerns quickly, respected their time and was proactive (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
		•3.5.5 Distribution of the extent to which injured persons agree their insurer/claims agent was able to identify and address any concerns they had (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
		•3.5.6 Distribution of the extent to which injured persons agree their insurer/claims agent was accountable for actions and honest in their interactions (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes
		•3.5.7 Distribution of the extent to which injured persons agree they trust the WC or CTP scheme to help them RTW/RTA (self-reported)	•Injured person survey	Based on SIRA Regulatory Measurement of Customer Experience and Outcomes Study Results only available for a representative sample of injured persons in the WC and CTP schemes

Data not collected

Data is available to SIRA

Data collected but not available to SIRA

Data is partially available to SIRA or will be available soon

Domain	Outcome	Proposed Metric	Required	Implementation ty Considerations
•••	4.1 Healthcare is person-	• 4.1.1 Distribution of time to first treatment	• Administrative claims data	Considerations Consistency in definition of 'treatment' and 'first
4. Safety and quality of	centred and high quality			treatment', and use of service / payment date compared to existing CTP reporting to be considered • Nuances in data for particular conditions
healthcare				(including, for example, 'deemed date' of injury or occurrence)
		4.1.2 % injured persons with musculoskeletal injuries identified as high risk of delayed recovery during screening who receive work focused cognitive behavioural therapy	Administrative claims data	Availability of appropriate providers 'High risk of delayed recovery' relies on baseline psychosocial screening and stratification
	4.2 Low value healthcare is	• 4.2.2 Number of claims with imaging performed	ciaims data	• Requires adequate coding for imaging
	minimised	4.2.3 Distribution of imaging performed	claims data	Requires adequate coding for imaging
		4.2.5 % claims with identified low value procedures or services (e.g. 'clean out' knee arthroscopy, high volume of physiotherapy sessions, imaging for lower back pain)	Administrative claims data	Requires adequate coding Requires identification and articulation of the targeted low value procedures or services
		4.2.8 Distribution of actual incapacity durations	• Administrative claims data	• Not identified
	4.4 Healthcare is delivered safely	• 4.4.3 Number and details of adverse behavioural events		Requires development of an adverse events log (or access to existing reporting mechanisms) Requires definition of 'adverse behavioural events' (for example, sexual, physical or other abuse) Opportunities to incorporate with SIRA's Regulatory Measurement of Customer Experience and Outcomes Study
5. Provider	5.1 Providers have the right expertise	5.1.1 Distribution of provider experience (years of practice, total and within compensable schemes)	•Administrative claims data	 Already undertaken for some provider groups Could be reported in provider approval processes (where these are in place)
capability, delivery and experience				
KEY: Data not o	collected	Data collected by available to SIRA	(rata is partially available to IRA or will be available
Data is ava	ailable to SIRA	Metric already in	place so	oon

Domain	Outcome	Proposed Metric	Required Data/Availability	Implementation Considerations
5. Provider	5.1 Providers have the right expertise	• 5.1.2 Distribution of provider expertise (conditions, industry)	• Administrative claims data • Provider expertise/ performance data	Requires development of categories of provider expertise
capability, delivery and experience		• 5.1.3 Distribution of providers (geography)	• Administrative claims data	Provider registration location may not reflect where service delivery takes place
	5.2 Provider wellbeing, engagement and	5.2.1 Distribution of perceived level of wellbeing among providers	• Provider survey	Requires survey platform, development, data capture and management
	satisfaction is improved or maintained	5.2.2 Distribution of level of engagement with SIRA schemes among providers	• Provider survey	Requires survey platform, development, data capture and management
		5.2.3 Distribution of level of satisfaction with SIRA schemes among providers	• Provider survey	Requires survey platform, development, data capture and management
	6.1 Healthcare is cost and resource efficient in	• 6.1.1 Health expenditure by scheme	• Administrative claims data	Consistency in definition of 'health expenditure' with existing reporting needs to be considered
6. Effectiveness and efficiency of healthcare	delivering outcomes	• 6.1.2 Health expenditure by insurer group/claim agent	• Administrative claims data	Consistency in definition of 'health expenditure' with existing reporting needs to be considered Data quality issues with an insurer in CTP currently being resolved Data quality issue with missing service dates
		• 6.1.3 # claims that received a healthcare service by scheme	• Administrative claims data	Consistency in definition of time period since last healthcare service payment with existing or similar metrics to be considered
		•6.1.4 # claims that received a healthcare service by insurer group/claim agent	• Administrative claims data	Consistency in definition of time period since last healthcare service payment with existing or similar metrics to be considered
		6.1.5 Experience analysis to assess main driver of healthcare spend, attributed to: exposure, utilisation and inflation (economic or medical cost)	• Administrative claims data	• 'Exposure', 'utilisation' and 'inflation' need to be well- defined
KEY: Data not o	collected	Data collected b	/ 🛋	a is partially available to A or will be available
Data is ava	Data is available to SIRA Metric already in place Soon Soon			

scost and resource efficient in delivering outcomes 6. Effectiveness and efficiency of healthcare • 6.1.7 Average cost per service by insurer group/claim agent of healthcare • 6.1.8 % services charged as non-standard items • 6.1.9 Total payments split by service group vs total • 6.1.10 Average cost per service by insurer group/claim agent and service group vs total • 6.1.10 Average cost per service by insurer group service by insurer group/claim agent and service group vs total • 6.1.10 Average cost per service by insurer/claim agent and service group vs total • 6.1.10 Average cost per service by insurer/claim agent and service group vs total • 6.1.10 Average cost per service by insurer/claim agent and service group vs total • 6.1.10 Average cost per service by insurer/claim agent and service group vs total • 6.1.10 Average cost per service by insurer/claim agent and service types of the top 5 providers across the 4 largest service types • 6.1.12 Variation of service claims data • 6.1.13 # services by • Administrative claims data • Administrative claims data • Not identified • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider broadenir to more providers and service types if needed • May consider of Not identified • May consider broadenir to more providers and service types if needed • May consider of Administrative claims data • May consider of Not identified • May consider of Not identified • May consider of Administrative claims data • May consider of Administrative claims data • May consider of Administrative claims data • M	omain	Outcom	Proposed Metric	Required Data/Availability	Implementation Considerations
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be well-defined Could be used in conjunction with investigations into whether 'complex' case receive suitable case management -6.1.9 Total payments split by service group -6.1.10 Average cost per service by insurer/claim agent and service group vs total -6.1.11 Variation of service costs across the 4 largest service types -6.1.12 Variation of service costs for the top 5 providers across the 4 largest service types -6.1.13 # services by service type by scheme -6.1.14 # service types per -6.1.14 # service types per -6.1.15 # service types per -6.1.16 # service types per -6.1.17 # service types per -6.1.18 # service types per -6.1.19 total payments split -6.1.20 Administrative claims data -6.1.30 Average cost per service daims data -6.1.30 Average cost per service daims data -6.1.30 Average cost per service by insurer/claim agent and service daims data -6.1.30 Average cost per service by insurer/claim agent and service daims data -6.1.30 Average cost per service daims data -6.1.30 Average cost per service by insurer/claim agent and service daims data -6.1.31 Wariation of service claims data -6.1.30 Average cost per service by insurer/claim agent and service daims data -6.1.31 Wariation of service claims data -6.1.31 # service by service types per -6.1.31 # service types per -6.1.31 # service by service types per -6.1.31 # service types per -6.1.31 # service types per -6.1.32 # service types per -6.1.34 # service types per -6.1.35 # service types per -6.1.36 # service types per -6.1.37 # service types per -6.1.38 # service types per -6.1.31 # service types per -6.1.31 # service types per -6.1.32 # service types per -6.1.34 # service types per	althcare		service by insurer group/claim agent	claims data	time frame to be considered
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•6.1.13 # services by scheme claims data •6.1.14 # service types per •Administrative •Not identified •Not identified •Not identified			costs for the top 5 providers across the 4		service types if needed • Whether providers defined by organisation, or as
•6.1.14 # service types per •Administrative •Not identified			-		
			 	• Administrative	• Not identified
•6.1.15 # services by service type by insurer group/claim agent •Administrative claims data •Not identified			service type by insurer		Not identified
• 6.1.16 # service types per claim by insurer claims data group/claim agent			claim by insurer		Not identified
utilisation per claim claims data to more service types if across the 4 largest service types			utilisation per claim across the 4 largest service types	:	needed
utilisation per claim for 5 claims data to more providers and largest providers across to more providers and service types if needed			utilisation per claim for 5 largest providers across the 4 largest service	:	service types if needed • Whether providers defined by organisation, or as

KEY:

O Data not collected

O

Data collected but not available to SIRA

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Data is partially available to SIRA or will be available soon

Data is available to SIRA

Metric already in place

Domain	Outcome	Proposed Metric	Required Data/Availability	Implementation Considerations
	6.1 Healthcare is cost and resource efficient in	• 6.1.19 # duplicate payments identified by insurer/claim agent and service group vs total	• Administrative claims data	Not identified
6. Effectiveness and efficiency of healthcare	delivering outcomes	• 6.1.22 Healthcare cost/increment RTW	Administrative claims data Activity/work related functional outcome measure	Definition of RTW Consistency with the RTW Measurement Framework
		• 6.1.24 Number of claims with paid non-compliant code-conjunctions	• Administrative claims data	Not identified
		•6.1.25 Distribution of claims with paid non- compliant code- conjunctions by service type, provider, scheme and insurer/claim agent	• Administrative claims data	Not identified
		• 6.1.26 Number of payments above maximum fees (as specified in fees orders and AMA fees list)	• Administrative claims data	Not identified
		• 6.1.27 Distribution of payments above maximum fees (as specified in fees orders and AMA fees list) by service type, provider, scheme and insurer/claim agent	• Administrative claims data	• Not identified
KEY:	allo ato d	Data collected b	ut not	is partially available to

Data not collected

Data is available to SIRA

O Data collected but no available to SIRA

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Data is partially available to SIRA or will be available soon

4.4. Proposed priority metrics for Horizons 2 and 3

The proposed priority metrics across the Horizons 2 and 3 are included in Table 6 below¹⁶. These metrics are largely aspirational and have been included to illustrate the types of information SIRA intends to utilise to support the health outcomes framework in the future state.

Table 6: Proposed priority metrics by implementation horizon

Domain	Outcome	Proposed Priority Metric (based on ability to support an outcomes-focused approach)	Implementation Horizon
	1.1 Physical and mental health is improved or	1.1.1 % claims have baseline health outcome measures data adequately captured at baseline and over time	Horizon 2
1. Physical and	maintained	1.1.3 % gain/loss in health outcome measures over time	Horizon 3
mental health		1.1.4 Distribution of gain/loss in health outcome measures over time	Horizon 3
		1.1.5 % claims which have psychological distress measures captured at baseline (screening) and over time	Horizon 2
		1.1.6 Distribution of psychological distress measures at baseline and over time	Horizon 2
		1.1.9 % claims with psychopathology measures at baseline and over time	Horizon 2
		1.1.12 Distribution of gain/loss in psychopathology measures over time	Horizon 2
		1.1.14 % claims with primary non psychological injuries that have developed to secondary psychological injuries	Horizon 2
		1.1.15 Active secondary psychological claims as % of all active claims over time	Horizon 2
	1.2 Functioning is improved or maintained	1.2.1 % claims which have activity/work related functional outcome measures captured at baseline and over time	Horizon 2
		1.2.2 Distribution activity/work related functional outcome measures at baseline and over time	Horizon 2
		1.2.3 % gain/loss in activity/work related functional outcome measures over time	Horizon 3
		1.2.4 Distribution of gain/loss in activity/work related functional outcome measures over time	Horizon 3
	2.1 Holistic wellbeing is taken into account	2.1.1 % claims with psychosocial outcome measures captured at baseline and over time (stratification and segmentation)	Horizon 2
2. Wellbeing		2.1.2 Distribution of psychosocial measures at baseline and over time (stratification and segmentation)	Horizon 2
	2.2 Return to activities/work in an	2.2.1 % claims with RTA/RTW projections captured	Horizon 2
	appropriate time	2.2.2 Distribution of RTA/RTW projections at baseline and over time	Horizon 2
		2.2.3 % injured persons who RTA/RTW within appropriate (projected) time period	Horizon 3
		2.2.5 Distribution of gain/loss in RTA/RTW measures over time	Horizon 3
		2.2.7 % achievement of projected RTA/RTW outcomes	Horizon 3
		2.2.10 % injured persons who have returned to work in any capacity for at least three consecutive months	Horizon 3

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¹⁶ SIRA has also developed additional lower priority metrics for these horizons, which will be refined in line with the approach described in *Section 5 – Plan for engagement and co-design*.

Domain	Outcome	Proposed Priority Metric (based on ability to support an outcomes-focused	Implementation	
		approach)	Horizon	
•	2.2 Return to activities/work in an appropriate time period	2.2.11 Distribution of number of RTW attempts before durable RTW is achieved	Horizon 2	
2. Wellbeing	2.3 Injured persons have a sense of self-	2.3.1 % claims with self-efficacy measures adequately captured at baseline and over time	Horizon 2	
	efficacy	2.3.2 Distribution of self-efficacy measures at baseline and over time	Horizon 2	
	2.4 Social and environmental factors are considered to support return to activities, return to work and/or quality of life	2.4.1 % claims with pre-injury work/life functional demands adequately articulated	Horizon 3	
		2.4.3 % achievement of pre-injury work/life functional demands over time	Horizon 3	
		2.4.4 Distribution of pre-injury work/life functional demands met at baseline and over time	Horizon 3	
0	3.1 Healthcare is accessible in the right place, at the right time	3.1.1 % healthcare services within warranted variation for claimed condition	Horizon 2	
3. Injured person	3.3 Healthcare is integrated	3.3.1 % complex cases with multidisciplinary team healthcare in place	Horizon 2	
experience and accessibility		3.3.2 % complex cases with detailed multidisciplinary team recovery plan including milestones in place	Horizon 3	
••	4.2 Low value healthcare is minimised	4.2.1% claims with unwarranted variation from clinical guidelines/evidence-based practice	Horizon 2	
		4.2.6 % claims with projected incapacity durations at baseline	Horizon 3	
4. Safety and		4.2.7 Distribution of projected incapacity durations	Horizon 3	
quality of healthcare		4.2.9 % claims exceeded projected baseline incapacity duration	Horizon 3	
		4.2.10 % actual/expected incapacity durations exceed projected incapacity durations	Horizon 3	
	4.4 Healthcare is delivered safely	4.4.1 % claims with medically unnecessary incapacity durations	Horizon 3	
	4.5 Healthcare is driven by information 5.1 Providers have the right expertise	4.5.1 % claims passing audit of biopsychosocial information collection	Horizon 2	
		4.5.2 % claims passing audit of biopsychosocial information utilisation in case management	Horizon 2	
		5.1.4 Distribution of multidisciplinary teams (conditions, geography, virtual, industry)	Horizon 2	
5. Provider capability,	5.4 Providers exhibit value-based behaviours	5.4.1 Distribution of health outcome measure gain/loss by provider	Horizon 2	
delivery and experience		5.4.2 Provider cost/increment of outcome improvement by provider	Horizon 3	
	6.1 Healthcare is cost and resource efficient in delivering outcomes	6.1.20 Healthcare cost/increment of health outcome improvement	Horizon 3	
6. Effectiveness and efficiency of healthcare		6.1.21 Healthcare cost /increment RTA	Horizon 2	

4.5. Implementation considerations

Several factors must be considered in the design and implementation of metrics, including for the metrics proposed for the first phase. These considerations include:

- **Metric definition** Validity of the metric in measuring the defined outcome, type of measure (for example, count versus rate of incidence), and frequency of data collection (for example, point in time versus flow during a period).
- **Industry/SIRA standards** Consistency with measures currently used within SIRA or in other parts of the regulatory and healthcare industries.
- **Measurement period** Period over which metric is reported and frequency of update (for example, rolling 12-month measure, reported quarterly or point in time, reported annually).
- Individual versus portfolio Validity of the metric at an individual level, or aggregated to a cohort or portfolio level, as required by the intended use of the metric.
- **Case-mix adjustments** Controlling for case-mix (for example, demographic factors, health status and prior treatments).
- **Weighting** Whether to weight the metric calculation when reporting at a portfolio level (for example, by expenditure, number of injured persons, etc.).
- **Scheme differences** The relevance of the metric to the different schemes, any potential differences in definition between schemes and the implications of scheme design.
- **Segmentation** Potential to view metric at portfolio level and/or for different segments or sub-groups (for example, time since accident, physical versus psychological, injury severity, complexity, prior health status, etc.).
- **Baselining and benchmarking** Understanding relativity of metric to either a baseline or external benchmark.
- **Data availability** Understanding the availability of data to support the metric currently, the potential to collect the data in the short-, medium- or longer-term, the method by which collection would take place, and the roles of various stakeholders to support data collection and sharing.
- **Feasibility of data collection and reporting** The implementation prioritisation should consider resource constraints and the cost of building capability.
- **Single source of truth of data** Ensuring the calculation and assessment of metrics is based on one source for the required data.
- Evaluation of other features Considerations around reporting bias and appropriately allowing for impact of process changes (for example, apparent increases in diagnoses may be due the collection of additional data relative to what was previously available).
- **Data security and confidentiality** Due to the sensitivity of the data collected in the WC and CTP schemes, appropriate data security and confidentiality must be maintained when collecting and sharing data amongst scheme participants, and monitoring and reporting on metrics.

Given metrics need to appropriately consider different cohorts of injured persons, the available data and corresponding level of granularity should be considered to allow for cohort-level evaluation. Furthermore, metrics should be designed to avoid pursuance of inappropriate goals and limit unintended consequences.

4.6. Governance of the health outcomes framework

The health outcomes framework, and the associated processes and activities, require a strong and integrated governance framework to ensure clear:

- Oversight of the framework and its application, including key points of accountability.
- Integration of the framework at a scheme level.
- Roles and responsibilities for the implementation and application of the framework.
- Processes to be followed when reviewing and (where required) updating the health outcomes framework, defining metrics, conducting monitoring and reporting, or undertaking research, evaluation or experience investigations using the framework.
- Methods and triggers for engagement with stakeholders.
- Data governance and management¹⁷, including:
 - Protocols relating to data quality, security, confidentially and ethics,
 - Roles to facilitate/authorise decisions about data,
 - How decisions are made relating to data, and
 - How data is collected, stored and used.
 - Quality assurance processes.

Governance considerations and requirements will be defined at the commencement of Horizon 1.

4.7. Proposed roles and responsibilities

The implementation and ongoing application of the health outcomes framework will require collaboration between SIRA and a number of implementation partners, including insurers/claim agents, employers, healthcare providers, healthcare regulators and peak bodies, and other scheme participants. SIRA recognises the importance of providing clarity on the roles and responsibilities of each implementation partner.

The implementation of the health outcomes framework will be closely related to, and in some areas, dependent on SIRA's value-based healthcare transformation. Accordingly, SIRA's intention is to present an early view on proposed roles and responsibilities, which will be refined and agreed based on further consultation with the sector (described in Section 5 – Plan for engagement and co-design).

Proposed roles and responsibilities for an initial list of implementation partners are summarised in Table 7, Table 8 and Table 9 below. The list of implementation partners featured in these tables is illustrative – other stakeholders may also have roles relating to the framework¹⁸.

¹⁷ Where practical, opportunities to align with the conventions, policies and governance practices developed by SIRA's Data Working Group (DWG) will be considered. This includes, for example, ensuring all relevant terms reside in a central glossary and contain metadata such as privacy classification, security classification, data source and any statutory legislation or guidance material references to support a user's contextual understanding of the term (where applicable).

¹⁸ The tables in this section focus on implementation partners anticipated to have responsibilities in the implementation and ongoing application of the health outcomes framework. These tables do not represent an exhaustive list of stakeholders that will be engaged. In addition to the implementation partners listed below, as part of the development, ongoing refinement and application of the framework, SIRA intends to consult with injured persons and their families, academics and clinical experts, and other scheme participants and their reference groups.

Table 7 details the roles and responsibilities for implementation partners during the development and ongoing refinement of the framework.

Table 7: Proposed roles and responsibilities – Developing and refining the framework

	Implementation Partners				
Proposed Roles and Responsibilities	SIRA	Insurers/claim agents	Employers	Healthcare providers	Healthcare regulators and peak bodies
Coordinating stakeholder consultation on the framework	R & A	С	С	С	С
Defining outcomes and metrics	R & A	С	С	С	С
Establishing governance structure for the framework	R&A	С	С	С	С
Guiding stakeholders on the application of the framework (including development of guidelines)	R & A	С	С	С	С
Ongoing refinement of the framework	R & A	С	С	С	С

KEY:

- **Responsible**: Implementation partners who complete or perform the activity or task.
- **Accountable**: Implementation partners who are accountable for the success of the activity or task, and associated decision-making.
- **Consulted**: Implementation partners who are consulted to provide input.

To enable the framework to be deployed as intended, a range of implementation partners will be required to support data collection and sharing, and reporting on metrics to ensure visibility of progress towards the achievement of outcomes.

Table 8: Proposed roles and responsibilities – Deploying the framework

	Implementation Partners				
Proposed Roles and Responsibilities	SIRA	Insurers/claim agents	Employers	Healthcare providers	Healthcare regulators and peak bodies
Capturing and sharing data	R & A	R	R	R	R
Calculation of and reporting on metrics, benchmarks and baselines (where required)	R & A	R	С	С	С

KEY:

- **Responsible**: Implementation partners who complete or perform the activity or task.
- Accountable: Implementation partners who are accountable for the success of the activity or task, and associated decision-making.
- **Consulted**: Implementation partners who are consulted to provide input.

Collaboration will be required across the healthcare ecosystem to ensure the framework is applied as intended to support the achievement of health outcomes.

Where the framework is applied to inform the design of interventions, consultation with the target beneficiaries will be required (including, but not limited to, injured persons and their families).

Table 9: Proposed roles and responsibilities – Applying the framework

	Implementation Partners				
Proposed Roles and Responsibilities	SIRA	Insurers/claim agents	Employers	Healthcare providers	Healthcare regulators and peak bodies
Applying the framework to inform service design	R & A	С	С	R	С
Applying the framework to inform assessment and case planning	R & A	R	С	R	С
Applying the framework to inform service delivery	R	R	С	R & A	С
Applying the framework to inform monitoring, research, evaluation and experience investigation	R & A	R	С	С	С
Applying the framework to inform performance management	R & A	R	С	С	С
Applying the framework to inform continuous improvement	R & A	R	R	R	R

KEY:

- **Responsible**: Implementation partners who complete or perform the activity or task.
- Accountable: Implementation partners who are accountable for the success of the activity or task, and associated decision-making.
- **Consulted**: Implementation partners who are consulted to provide input.

5. Plan for engagement and co-design

5.1. The need for engagement and co-design

The transition to value-based healthcare represents a significant shift for the sector. As part of this transformation, SIRA is committed to partnering with the sector to co-design the implementation approach.

SIRA recognises that it will be particularly important to engage with the sector to seek input on the proposed the metrics and their intended uses, refine the implementation approach, and agree roles and responsibilities in the implementation and ongoing application of the framework.

Over the first implementation horizon, SIRA intends to engage insurers/claim agents, healthcare regulators and peak bodies, healthcare providers, academics and clinical experts, injured persons and their families (potentially via consumer representative or advocate groups), employers, and other scheme participants and their reference groups. Additional stakeholders may also be included in this horizon, as the implementation approach is refined.

SIRA anticipates engagement needs will exist along a spectrum, as illustrated in the conceptual model described in Figure 8. The level of engagement required will be influenced by the proposed role each stakeholder will have in the implementation and ongoing application of the health outcomes framework.

Figure 8: Conceptual model for levels of engagement¹⁹

					00000
	INFORM	LISTEN	DISCUSS	COLLABORATE	STAKEHOLDER -LED
Purpose of engagement	• Ensuring stakeholders are aware of and have opportunities to learn more about the framework and supporting documentation, implementation approaches, associated decisions and impacts.	• Obtaining feedback from stakeholders on their views and concerns relating to the framework, implementation approaches and associated decisions.	Working with stakeholders to seek advice and recommendat- ions relating to the framework, implementation approaches and associated decisions.	• Engaging stakeholders in shared decision-making relating to the framework and implementation approaches, through an equal and reciprocal relationship.	• Empowering stakeholders to take a leadership role in the decision-making process relating to the framework and implementation approaches.
SIRA's commitment to stakeholders	We will keep you informed and educated.	We will listen to and acknowledge your feedback in decision- making.	We will seek your advice, and work with you to ensure your views and concerns are reflected in decision- making.	We will partner with you to make decisions.	We empower you to make decisions.
Example engagement approaches	 Publications Presentations Online (e.g. web pages) Email communication 	Consultation papersFocus groupsSurveys	Workshops	Working groups Advisory groups	Governance committees

¹⁹ Adapted from Patterson Kirk Wallace, as cited in Health Canada's (2000) *Policy Toolkit for Public Involvement in Decision-making*, p.12.

5.2. Objectives for engagement and co-design

The objectives of, and method for, engaging each stakeholder will be tailored based on needs. Examples of the objectives which will be sought from the engagement and codesign process include:

- Communicating the intention, goals and expectations relating to the framework.
- Co-designing metrics and their intended uses.
- Identifying requirements to ensure integration of the framework at the scheme level
- Agreeing the implementation approach.
- Agreeing roles and responsibilities for implementation and ongoing application of the framework (including, for example, data collection and sharing).
- Understanding further engagement, training and education needs.
- Collaborating on opportunities to improve service design, delivery and evaluation of healthcare services, identified through application of the framework.

A combination of workshops, consultation papers and other mechanisms will be utilised to seek input from stakeholders on these topics.

In some cases, stakeholder groups will be engaged concurrently and contribute to shared input-gathering and decision-making activities relating to the framework. Where SIRA seeks to engage stakeholders in a shared decision-making process relating to components of the framework, it is anticipated that regular convening of a working group would be beneficial.

The intended approach and timeframes for engagement and co-design activities will be communicated with stakeholders as these details are finalised. SIRA intends to re-evaluate and refine the approach to engagement throughout the implementation horizons.

5.3. Immediate next steps

SIRA looks forward to continuing to partner with scheme participants to implement the health outcomes framework to support the journey towards value-based healthcare, and ultimately deliver improved outcomes for injured persons.

Next steps

Upon finalisation of the plan for engagement and co-design, SIRA will engage with stakeholders in the healthcare ecosystem to:

- seek input on the proposed the metrics and their intended uses,
- refine the implementation approach, and
- agree roles and responsibilities for implementation and ongoing application of the framework.

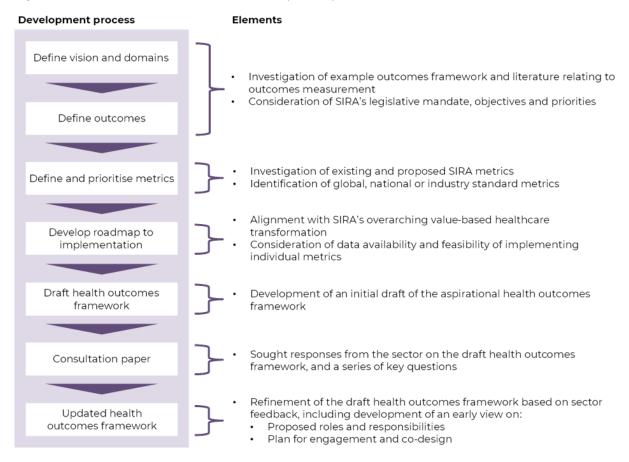
The intended approach and timeframes for engagement and co-design activities will be communicated with stakeholders as these details are finalised.

This input will support the implementation and application of the health outcomes framework.

Appendix A: Development of the health outcomes framework

SIRA's health outcomes framework was developed in consultation with subject matter resources and stakeholders of the WC and CTP schemes. The framework was developed in several stages, as illustrated in Figure 9. Feedback was sought and consultation performed throughout the development of the framework.

Figure 9: Health outcomes framework development process



As highlighted in the figure above, the development process involved:

- Investigation of health outcomes framework examples in use across NSW Government and various other organisations, bodies and agencies.
- Consideration of SIRA's legislative mandate, scheme purpose and objectives and strategic priorities.
- Investigation of existing and upcoming metrics and reporting in place at SIRA.
- Sourcing and investigation of existing global, national or industry standard metrics.
- Consideration of data availability for short listed metrics.
- Consultation and feedback through a combination of workshop sessions, discussions, surveys and written responses (including from external subject matter resources and consultants).
- Publication of a consultation paper on the draft framework²⁰.
- Refinement of the framework, incorporating feedback from public submissions, proposed roles and responsibilities, and a plan for engagement and co-design.

²⁰ SIRA (2020), Health outcomes framework for the NSW Workers Compensation and Motor Accident Injury/Compulsory Third Party Schemes: Consultation paper (21 July 2020).

Appendix B: Development of metrics

Development of the individual metrics outlined in the health outcomes framework and accompanying appendices drew upon a combination of a consideration of existing global, national or industry standard metrics (where available and applicable) and internal metrics currently in place within SIRA to create an initial list of potential metrics for consideration. As outlined above, a consultation process was undertaken to gather and incorporate feedback from internal stakeholders and subject matter resources to refine the initial metric set. Final prioritisation of metrics for this iteration of the health outcomes framework was then undertaken by the Health Policy, Prevention and Supervision team.

Bibliography

The proposed metrics incorporate measures and indicators drawn from various global, national or industry sources relating to health outcomes, patient experience, provider experience, and efficiency and effectiveness of healthcare.

Specific sources which have informed the development of metrics include:

- ABIM Foundation (2021), *How Can I Implement Choosing Wisely In My Practice or Health System*?, Available at: http://www.choosingwisely.org/how-can-i-implement-choosing-wisely-in-my-practice-or-health-system/
- Australian Commission on Safety and Quality in Health Care (2012), Draft national set of practice-level indicators of safety and quality for primary health care, Available at: https://www.safetyandquality.gov.au/publications-and-resource-library/draft-national-set-practice-level-indicators-safety-and-quality-primary-health-care
- Australian Commission on Safety and Quality in Health Care (2016), Patient-reported outcome measures: an environmental scan of the Australian healthcare sector, Available at:
 - https://www.safetyandquality.gov.au/sites/default/files/migrated/PROMs-Environmental-Scan-December-2016.pdf
- Australian Commission on Safety and Quality in Health Care (2019), Australian
 Hospital Patient Experience Question Set, Available at:
 https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/australian-hospital-patient-experience-question-set
- Hurst L, Mahtani K, Pluddemann A, Lewis S, Harvey K, Briggs A, Boyle A, Bajwa R, Haire K, Entwistle A, Handa A and Heneghan C (2019), *Defining Value-based Healthcare in the NHS: CEBM report*, Available at: https://www.cebm.net/2019/04/defining-value-based-healthcare-in-the-nhs/
- International Consortium for Health Outcomes Measurement (2017), Low Back Pain Data Collection Reference Guide, Available at: https://ichom.org/files/medical-conditions/low-back-pain/low-back-pain-reference-guide.pdf
- International Consortium for Health Outcomes Measurement (2018), Depression & Anxiety Data Collection Reference Guide, Available at: https://ichom.org/files/medical-conditions/depression-anxiety/depression-anxiety-reference-guide.pdf
- Neubert A, Brito Fernandes O, Lucevic A, Pavlova M, Gulacsi L, Baji P, et al. (2020), 'Understanding the use of patient-reported data by health care insurers: A scoping review. PLoS ONE 15(12): e0244546. Available at: https://doi.org/10.1371/journal.pone.0244546

- Nicholas MK, Costa DSJ, Linton SJ, Shaw WS, Pearce G, Gleeson M, Pinto RZ, Blyth FM, McAuley JH, Smeets RJEM and McGarity A (2020), Implementation of Early Intervention Protocol in Australia for 'High Risk' Injured Workers is Associated with Fewer Lost Work Days Over 2 Years Than Usual (Stepped) Care, Journal of Occupational Rehabilitation, 30:93-104.
- NPS MedicineWise (2020), NPS MedicineWise, Available at: https://www.nps.org.au/
- NSW Ministry of Health (2019), *Performance framework*, Available at: https://www.health.nsw.gov.au/Performance/Pages/frameworks.aspx
- Porter ME, Teisberg EO (2006), Redefining Health Care: Creating Value-Based Competition on Results. Boston, MA: Harvard Business School Press.
- Safe Work Australia (2018), *National return to work survey 2018 Questionnaire*, Available at: https://www.safeworkaustralia.gov.au/doc/national-return-work-survey-2018-questionnaire
- Safe Work Australia (2019) National Return to Work Strategy 2020-2030, Available at: https://www.safeworkaustralia.gov.au/system/files/documents/1909/national_return_to_work_strategy_2020-2030.pdf
- Teisberg E, Wallace S, O'Hara S (2020), 'Defining and Implementing Value-Based Health Care: A Strategic Framework', *Academic Medicine*, 95:682-685
- Transport Accident Commission (2021), *Outcome Measures*, Available at: https://www.tac.vic.gov.au/providers/working-with-the-tac/outcome-measures

Principles for metrics

Numerous principles were considered in developing metrics for consideration for inclusion in the health outcomes framework, including:

• Operationally Meaningful

- Does the metric provide important and useful insight into healthcare in the schemes?
- Is action able to be taken or promoted in response to levels or movements in the metric to drive improved outcomes?
- Is the metric and its implications able to be readily interpreted or understood?

Relevance

- Does the metric align with the outcomes and vision outlined in the framework, and SIRA's legislated mandate and strategic priorities?
- o Is the metric reflective of the nature of SIRA's personal injury schemes and any differences between them?

Validity

o Does the metric measure what it is intended to measure?

Sensitivity to change

o Is the metric sufficiently sensitive to changes over time to allow these to be detected?

Reliability

o Is the metric able to be consistently measured or can it be reasonably foreseen to be measurable in the future?

o Does the metric have adequate intra- and inter-rater reliability?²¹

²¹ Intra-rater reliability refers to how consistent measurement of a constant phenomenon is by the same person; and inter-rater reliability refers to how consistent different individuals are at measuring the same phenomenon.

• Avoids duplication

o Does the metric or a related metric already exist and is reported on at SIRA?

Consistency

- o Is the metric consistent with existing reporting or are there justifiable reasons for any deviations?
- o Is the metric wording consistent with existing terminology or likely to cause confusion or misinterpretation?
- o Is the metric aligned with metrics reported and available from other jurisdictions or schemes to facilitate broader comparison and potential benchmarking, where relevant?

Disclaimer

This publication may contain information that relates to the regulation of workers compensation insurance, motor accident compulsory third party (CTP) insurance and home building compensation in NSW. It may include details of some of your obligations under the various schemes that the State Insurance Regulatory Authority (SIRA) administers.

However, to ensure you comply with your legal obligations you must refer to the appropriate legislation as currently in force. Up to date legislation can be found at the NSW Legislation website legislation.nsw.gov.au

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals, or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

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