



# A FRAMEWORK TO EVALUATE MUSCULOSKELETAL MODELS OF CARE



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The following organisations publicly support this evaluation framework.



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# FOREWORD

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The burden of disease associated with chronic non-communicable diseases (NCDs), particularly musculoskeletal conditions, is now clear. Indeed, data from the most recent analyses of the Global Burden of Disease study unequivocally reinforce this issue.

Urgent and coordinated global action is required to address the rising burden of disease associated with these conditions to ensure health services can meet the current and future needs of health consumers. Supporting low and middle-income nations to develop appropriate responses now is essential.

Models of Care represent one approach to respond to the burden of NCDs. Models of Care outline the principles of best practice management for specific conditions, thus providing guidance for 'what works' and 'how to implement it'.

Although many nations are developing Models of Care to address NCDs, there remains inconsistency in the approach to their development and evaluation, making comparisons between them difficult. Further, achieving sustainable implementation is challenging. For these reasons, development of an internationally-informed framework to evaluate the 'readiness' of Models of Care for implementation and their 'success' after implementation is of international importance.

The Global Alliance for Musculoskeletal Health of the Bone and Joint Decade is pleased to be a partner on this project that aimed to develop such a framework. While the focus of the Framework has been on musculoskeletal health, the end products have relevance to Models of Care for NCDs generally.

As a global community, our call to action is to now use the Framework to support and optimise our development, implementation and evaluation endeavours to improve the lives of people who are at risk of, or live with, chronic NCDs.



**Professor Anthony D. Woolf**  
Chair

Global Alliance for Musculoskeletal Health  
of the Bone and Joint Decade





# 1

EXECUTIVE  
SUMMARY  
AND USING  
THIS REPORT

Models of Care are increasingly viewed as an effective strategy to improve health service planning and delivery for non-communicable diseases. Despite the increased attention towards Models of Care, a universal framework to evaluate a Model's readiness for implementation and success after implementation is lacking. This Framework addresses these important gaps.

## THE FRAMEWORK AT A GLANCE

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### What is a Model of Care?

A Model of Care (**MoC**) is a principle-based guide that describes best practice care for particular health conditions or populations. The focus is on person-centred care and consideration of applicability in local settings. A MoC is not an operational plan for a health service or a clinical practice guideline.

### Who uses Models of Care?

MoCs have cross-sector and multi-stakeholder relevance. Policy makers, health administrators and managers, service delivery organisations, clinicians, researchers, funders, advocacy organisations and consumers use MoCs to inform best practice planning and delivery of health services.

### Purpose of this project and the Framework

To develop a comprehensive evaluation framework to assess the *readiness* for implementation and *success* after implementation of musculoskeletal MoCs. The Framework provides principle-based guidance on evaluating these important areas. Particular emphasis is placed on ensuring the Framework is applicable across a diverse range of environments and contexts.

## What is the Framework designed to do and why should I use it?

The Framework is designed to help individuals and organisations tasked with the planning, implementation or evaluation of MoCs.

Specifically, the Framework can be used to:

- Develop a clear and concise MoC document that is acceptable to local stakeholders.
- Judge whether a MoC is ready for implementation → *Readiness Stream*.
- Guide the initial implementation process → *Initiating Implementation Stream*.
- Consider performance measures that are likely to indicate the MoC is successful → *Success Stream*.

Part 4 of this report, “Putting the Framework into practice” provides practical examples of how the Framework could be used in practice.

## Development of the Framework

The Framework was developed using a four-phase approach, drawing on the knowledge and experiences of 93 international experts across 30 countries.

- **Phase 1:** Identification of the important concepts that underpin ‘readiness’ and ‘success’ of MoCs, based on in-depth interviews with Australian experts.
- **Phase 2:** Assessment of these concepts and their further development with an international panel of experts using an eDelphi method.
- **Phase 3:** Translation of the concepts into a usable and meaningful Framework for end users using a Knowledge-to-Action approach.
- **Phase 4:** Testing of the accuracy and acceptability of the Framework with the international expert panel.

## How to use the Framework

The Framework has three streams:

- Readiness.*
- Initiating implementation.*
- Success.*

Each stream has a number of domains and each domain has a number of themes. Each domain and theme is numbered to allow easy navigation across the Framework (Figure 1). Use the map on [page 11](#) to identify relevant parts for your work.

Themes marked with a gold star have been identified as essential to a particular stream (see essential checklist on [page 12](#)). Other themes should be viewed as important, but not necessarily essential in all settings.

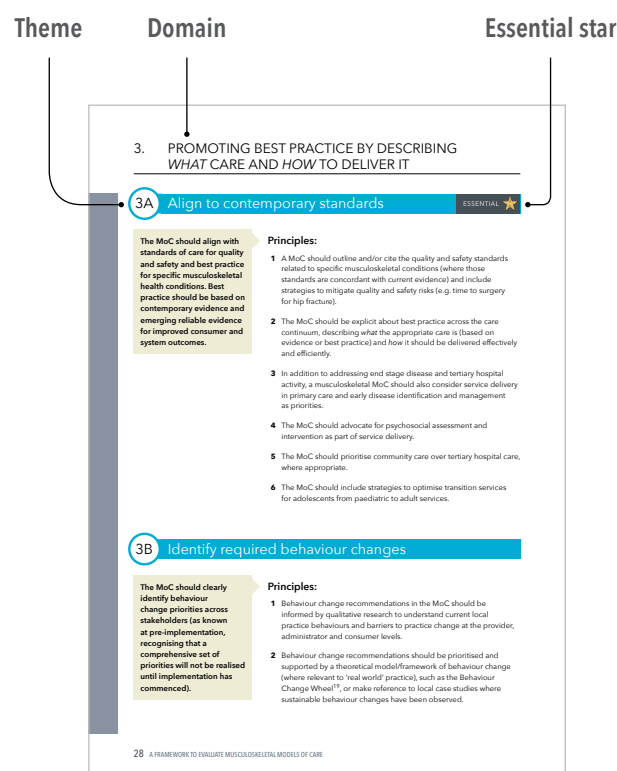


Figure 1: Example of Framework layout

# HOW TO USE THIS DOCUMENT AND THE FRAMEWORK

## The document as a whole

The document is divided into five parts:

- Part 1 is the executive summary.
- Part 2 provides the background to the project.
- Part 3 contains the Framework.
- Part 4 provides scenarios of how the Framework could be applied in practice.
- Part 5 contains supporting information – definitions, acknowledgements and references.

## The Framework in Part 3

The Framework contains three STREAMS:

**Stream 1. Readiness** (blue section): this stream outlines what should be included in a regional or national MoC, how it should be presented and the process of development. This stream is relevant to developers at a national or regional level.

**Stream 2. Initiating Implementation** (orange section): this stream describes how to approach implementation after a MoC has been developed.

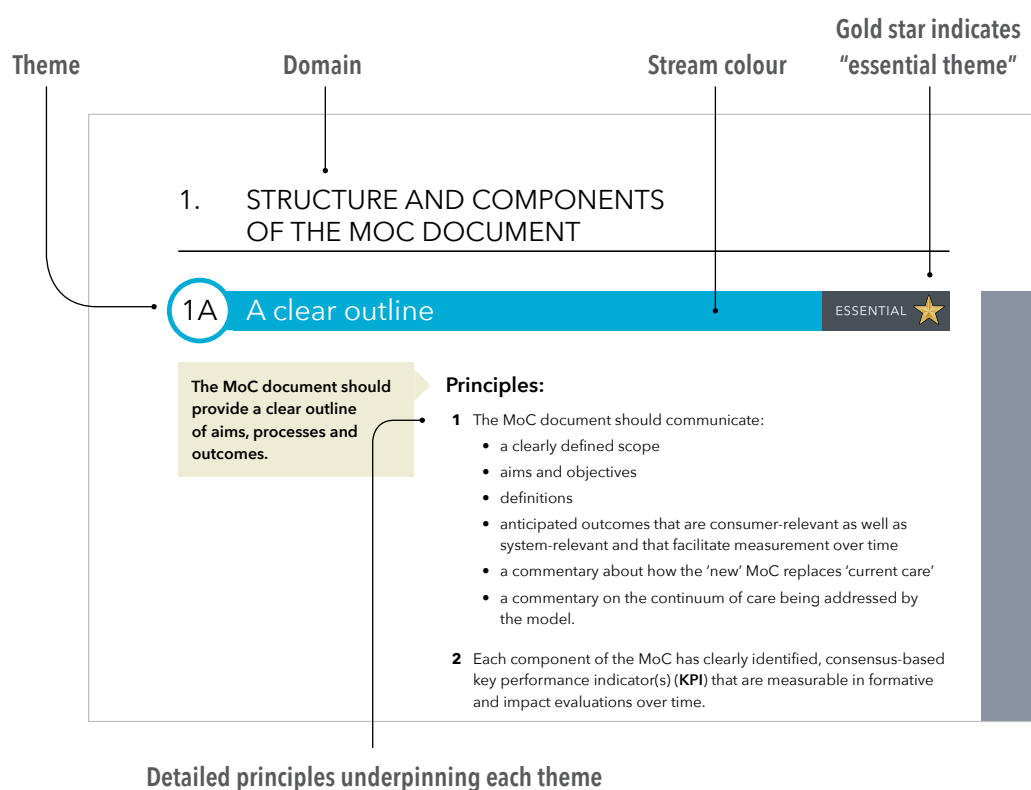
It provides guidance on what to consider for optimising implementation success and how to develop an implementation plan. This stream is relevant to those tasked with implementation of a MoC, usually at a local or regional level.

**Stream 3. Success** (green section): this stream considers how to approach evaluation, including both formative evaluation and impact evaluation that includes consumer and system-relevant outcomes. This stream is relevant to those tasked with monitoring the outcomes of a MoC, usually at a local or regional level.

Important notes for interpreting the Framework (Part 3):

- Within each stream are a number of DOMAINS.
- Within each domain are a number of THEMES.
- Essential themes are indicated by a gold star.
- A number of PRINCIPLES underpin each theme.

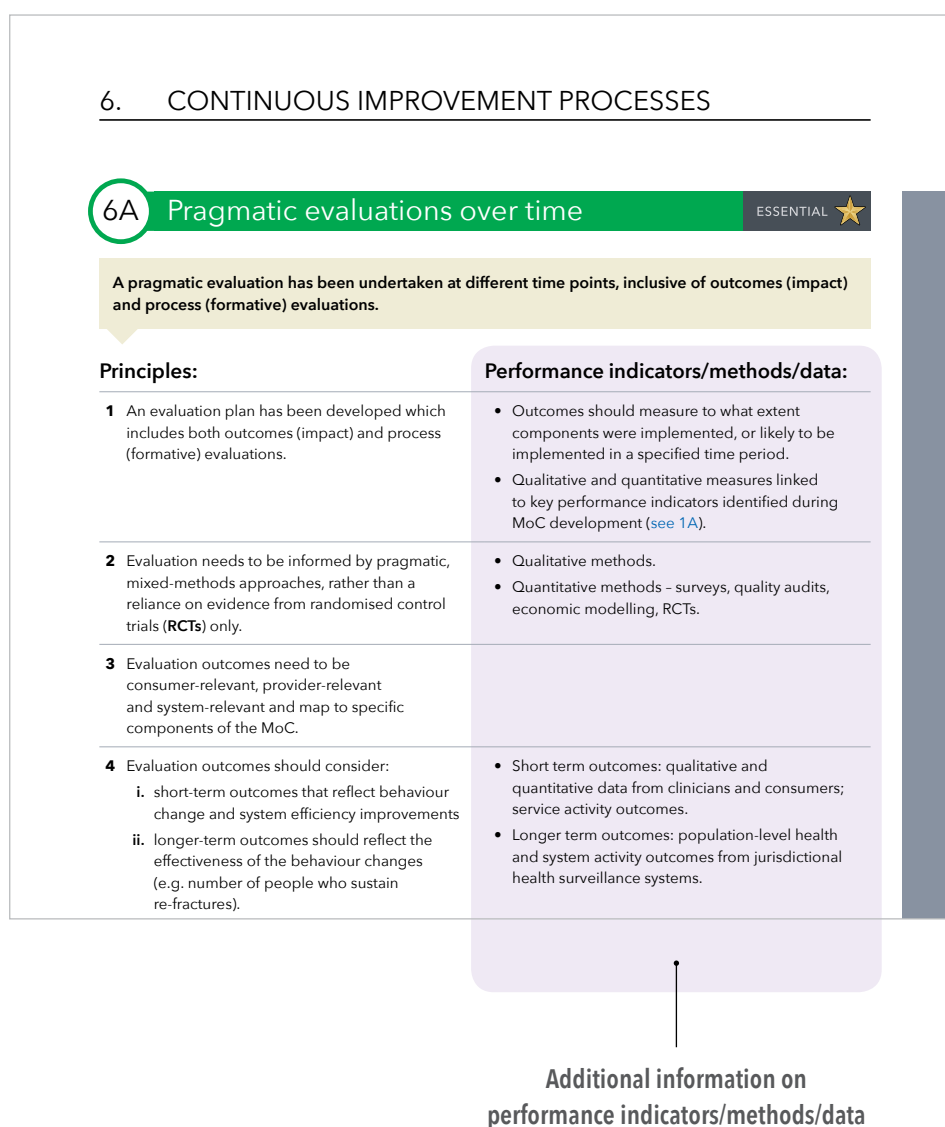
Figure 2 below shows how the Framework is structured using this hierarchy.



**Figure 2:** Structure of the Framework illustrating a stream, domain, theme and principles. Here, the Readiness stream is used as an example.

## Additional section for Success stream

The *Success stream* contains additional information on performance indicators/methods/data. This additional information recommends the “how to” with respect to undertaking evaluation activities (Figure 3).



**Figure 3:** Schematic of the Success stream illustrating the additional section related to performance indicators/methods/data.

# NAVIGATING THE FRAMEWORK FOR THE EVALUATION OF MUSCULOSKELETAL MODELS OF CARE



**Figure 4:** Orientation map for the Framework illustrating the 3 streams (3 colour bands), domains within the streams (blocks) and themes in the domains.

# A CHECKLIST OF ESSENTIAL ITEMS FOR EVALUATING MODELS OF CARE

The checklist below is a quick reference tool that contains only the essential evaluation areas, as determined by the expert panel that informed the development of the Framework. The checklist should be used in conjunction with the full Framework (Part 3 of this report), rather than a stand-alone resource.

READINESS STREAM		ESSENTIAL ★
1A	The MoC document should provide a clear outline of aims, processes and outcomes.	<input checked="" type="checkbox"/>
1B	The MoC document should outline a well-developed and objective 'case for change' argument based on local, regional or national circumstances.	<input checked="" type="checkbox"/>
1C	The MoC should clearly define the target population and identify any specific priority groups.	<input checked="" type="checkbox"/>
2A	The MoC should be informed by meaningful engagement and consultation with a broad range of stakeholders.	<input checked="" type="checkbox"/>
3A	The MoC should align with standards of care for quality and safety and best practice for specific musculoskeletal health conditions.	<input checked="" type="checkbox"/>
4A	The MoC should be consumer-centred in all aspects and user-focused when describing recommendations for implementation.	<input checked="" type="checkbox"/>
INITIATING IMPLEMENTATION STREAM		ESSENTIAL ★
5D	An implementation plan should be developed which includes guiding principles to inform the development of locally-relevant project or business plans to facilitate implementation of specific components of the MoC.	<input checked="" type="checkbox"/>
SUCCESS STREAM		ESSENTIAL ★
6A	A pragmatic evaluation has been undertaken at different time points, inclusive of outcomes and process evaluations.	<input checked="" type="checkbox"/>
6B	The MoC has ongoing quality assurance and troubleshooting processes.	<input checked="" type="checkbox"/>
6C	Data collection processes have been established to measure pre-defined key performance indicators (KPIs).	<input checked="" type="checkbox"/>
7A	Over time, there is evidence of improved consumer experiences, access, health outcomes and quality of life.	<input checked="" type="checkbox"/>
7D	Once fully implemented, there is behaviour change amongst stakeholders, led initially by opinion leaders, aligned to the recommendations of the MoC.	<input checked="" type="checkbox"/>
8A	There is an awareness of the MoC amongst stakeholders and organisations (inclusive of consumers) in the long term.	<input checked="" type="checkbox"/>
9A	The MoC has adaptability to be implemented in different contexts/environments/cultures and evolves over time.	<input checked="" type="checkbox"/>