Towards a global strategy to improve musculoskeletal health
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EXECUTIVE SUMMARY

Why this project?
Musculoskeletal (MSK) health refers to the health of the human locomotor system, comprising muscles, bones, joints and adjacent connective tissues. MSK health impairments include more than 150 discrete conditions (e.g. arthritis, gout, osteoporosis and fragility fractures, sarcopenia, auto-immune and rheumatic conditions), pain associated with MSK tissues/structures or presenting in MSK tissues/structures (e.g. low back pain, neck pain, fibromyalgia) and injury and trauma of the MSK system (e.g. sporting, occupational and road traffic injury and trauma).

A healthy MSK system is fundamental to mobility, dexterity, physical function, participation and quality of life. MSK health impairments are associated with pain, disability, reduced ability to work, study and care for self and others, increased health resource utilisation, and for many people, premature retirement from the workforce. These outcomes have profound impacts on a person’s quality of life and on the prosperity of families and communities.

MSK conditions are the leading cause of disability worldwide, with low back pain identified as the single condition responsible for the greatest disability in almost all countries. In high-income countries, MSK conditions are responsible for the greatest share of health system expenditure. Of all conditions, the need for rehabilitation globally is greatest for MSK conditions, in particular low back pain.

Robust population health research suggests the prevalence, burden and cost of MSK health impairments will continue to rise globally, especially in low and middle-income countries (LMICs), owing to population growth, population ageing, an increasing prevalence of risk factors for non-communicable diseases and increasing rates of MSK injury and trauma.

These sobering projections paint a stark warning to health systems and economies globally - the demand for health services for MSK health impairments will continue to rise and the economic impacts of lost human capital will increase dramatically. Health systems strengthening efforts are urgently needed to improve the prevention and management of MSK health impairment and arrest the escalating global disability and economic burden.

Responding to the problem
Over the last decade, there has been increasing national and global attention towards the health and economic burden associated with non-communicable diseases (NCDs) and injury, with multiple recommendations for urgent health systems strengthening efforts from the World Health Organization (WHO), national governments and civil society and advocacy organisations.

The Global Alliance for Musculoskeletal Health (G-MUSC) is a network of national and international patient, professional, scientific and civil society organisations around the world focused on raising the priority for MSK health in global and national health agendas. In 2020, G-MUSC called for a strategic global response to address the health, social and economic burden associated with MSK health impairments. In response to that call, the program of work described in this report aimed to engage and consult with the global MSK health community and other multi-sectoral stakeholder groups, to inform the co-design of a blueprint for a global strategy for MSK health.
What was done in this project?

The purpose of the work was not to develop a full strategy, but rather, identify requisite components, i.e. a ‘blueprint’, to guide later strategy development that could be adaptable for global-level and/or country-level health systems strengthening efforts. Importantly, the blueprint was co-designed and supported by the global community, including people with lived experience. It is intended that this work would ultimately support, guide and accelerate emerging initiatives within the World Health Organization (WHO) to prioritise MSK health within its 13th General Program of Work and the strategic directions of other global and international agencies.

Three phases of work were undertaken to derive the blueprint of actions:

1. **Qualitative study**: An in-depth qualitative study of international key informants (KIs) to understand the contemporary global landscape for MSK health and identify the key priorities and actions for a global strategy to improve prevention and management of MSK health.

2. **Health policy scoping review**: A scoping review of national health policies and strategies relevant to MSK health to create a snapshot of contemporary policy trends and priorities.

3. **Global eDelphi**: Integration of the earlier two phases to create a framework of components for a global strategy that were presented to the global MSK health community and other multi-sectoral stakeholders for review and priority ranking in an eDelphi study.

Overview of findings

Thirty-one KIs participated in the qualitative study, representing 20 countries and 25 peak global or international organisations.

From Phase 1, the qualitative data were used to construct a logic model for the program of work and to create a structure for the framework of components/actions of a global strategy on MSK health. The logic model comprises 5 guiding principles, 8 pillars (strategic priority areas) and 7 accelerators for action.

From Phase 2, the health policy scoping review identified 41 eligible policy documents from 22 countries and 2 regions. Eight priority policy themes were identified and these mapped closely to the 8 pillars identified in the logic model.

Finally, in Phase 3 an eDelphi study was deployed, involving 674 multi-sectoral stakeholders across 72 countries. The Delphi panellists were asked to rate the importance of and comment on, a framework of 8 pillars and 60 detailed components/actions. Ultimately, a framework of 8 pillars and 59 components/actions was supported.

**Executive Summary Figure 1 (on next page)**:

Data-driven logic model developed for the project directly informed by the Phase 1 qualitative study with international key informants. The logic model is adapted from Briggs et al. and supported by G-MUSC.
G-MUSC vision: A world where prevention and management of musculoskeletal (MSK) health conditions, MSK pain and MSK injuries/trauma are prioritised in health systems to optimise people’s functional ability and participation across the lifecourse and to reduce the associated global burden of disability.

Goal: To create an adaptable blueprint for a global strategy to support country-level health systems strengthening in value-based MSK health, injury and pain care that is co-designed and supported by the global community, including patients and which targets improving function, participation and overall quality of life for all ages.

Musculoskeletal (MSK) health means MSK conditions, MSK pain and MSK injury and trauma.

**GUIDING PRINCIPLES**

1. **Adaptability to local contexts**
2. **Inclusiveness through broad consultation across economies and co-design, including patients/citizens**
3. **Improve function, quality of life and overall health**
4. **Adopt a lifecourse approach to MSK health, from childhood to older age**
5. **Equitable access to early, value-based care**

**PILLARS FOR HEALTH SYSTEMS STRENGTHENING FOR MUSCULOSKELETAL HEALTH**

- Engaging, empowering and educating communities
- Leadership, governance and shared accountability
- Financing approaches
- Service delivery
- Equitable access to medicines and technologies
- Workforce
- Surveillance
- Research and innovation

**ACCELERATORS**

- Increase societal and government awareness of MSK health and the impacts of MSK-related disability
- Identify essential, evidence-based standards or actions to enable lower-resourced settings to initiate reforms
- Align with existing global or regional strategies or policies
- Provide guidance on MSK health in the context of pandemics; e.g. COVID-19
- Translate guidance into multiple languages
- Leverage multi-sectoral partnerships and co-operation
- Co-design objectives and performance indicators for a full strategy
### PILLARS FOR HEALTH SYSTEMS STRENGTHENING FOR MUSCULOSKELETAL HEALTH

#### PILLAR 1
Engaging, empowering and educating citizens, communities, organisations and governments

- 5 priority sectors for pursuing engagement and forging partnerships to support prevention and management of MSK health
- 4 priority sectors for MSK health education
- 7 priority messages for public health education about MSK health
- 5 priority enablers to drive advocacy and support community-wide education

#### PILLAR 2
Leadership, governance and shared accountability

- 3 actions for integration with existing policy and systems strengthening initiatives
- 4 actions for global and national leadership to prioritise MSK health, pain and injury prevention and care
- 2 actions for measurement and classification
- 1 action for legislation and regulation

#### PILLAR 3
Financing approaches

- 1 action for integrated financing models
- 3 actions for flexibility for different financing models
- 2 actions for financing for the right care, at the right time, by the right team, in the right place

#### PILLAR 4
Service delivery

- 4 actions for delivery of the right care: effective, safe, affordable and accessible
- 1 action for care at the right time: early diagnosis, triage and intervention for secondary prevention
- 1 action for delivery of care from the right team: interprofessional service models
- 3 actions for delivery of care in the right place: bolstering community and primary care to reduce inequity in access to care
- 3 actions for prevention

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**Executive Summary Figure 2:** Eight pillars and their supporting actions.
**EXECUTIVE SUMMARY**

Equitable access to medicines and technologies

- 2 actions

**PILLAR 5**

Workforce

- 3 actions for workforce volumes and access
- 4 actions for workforce training
- 1 action for workforce remuneration

**PILLAR 6**

Surveillance: monitoring population health

- 3 actions

**PILLAR 7**

Research and innovation

- 5 priority fields of research
- 2 capacity building priorities in MSK research
- 1 action for funding MSK health research
- 2 actions for innovation and evidence translation

**PILLAR 8**
Ten components/actions of the framework were considered essential, irrespective of the level of economic development across countries. These essential actions included:

### Essential, globally-relevant health systems strengthening actions for MSK health

1. Drive engagement and partnerships with citizens, patients and civil society organisations.
2. Drive engagement and partnerships with industry, workplaces and employers.
3. Drive engagement and partnerships with national and sub-national governments.
4. Deliver MSK health education across the following sectors: schools and higher education facilities; workplaces; health workforce; and the community, to improve prevention and management of MSK health.
5. Foster and support country-level leadership to prioritise MSK health impairment by national governments.
7. Integrate health promotion and health care delivery for MSK health into existing healthcare financing models.
8. Ensure service models for MSK conditions support early diagnosis and triage and management through local care pathways.
9. Prioritise evidence-based diagnostic and therapeutic practices in service models over approaches that are not supported by evidence, are costly and potentially harmful.
10. Identify, resource and provide access to essential therapeutics and rehabilitation for priority MSK conditions.

### What does this mean for health systems?

Without action on MSK health, including population-level prevention and appropriate management, the demand on international healthcare systems attributed to MSK health impairments will continue to rise rapidly and become unsustainable. The framework of pillars and priority actions/components outlined in this report provides a blueprint for the development of a global strategy to improve the prevention and management of MSK health. A global strategy should then be adapted to local contexts for targeted health systems strengthening efforts.