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Models of Care for musculoskeletal health: Moving towards meaningful implementation and evaluation across conditions and care settings

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A B S T R A C T

Models of Care (MoCs) are increasingly recognised as a system-level enabler to translate evidence for 'what works' into policy and, ultimately, clinical practice. MoCs provide a platform for a reform agenda in health systems by describing not only *what* care to deliver but also *how* to deliver it. Given the enormous burden of disease associated with musculoskeletal (MSK) conditions, system-level (macro) reform is needed to drive downstream improvements in MSK healthcare – at the health service (meso) level and at the clinical interface (micro) level. A key challenge in achieving improvements in MSK healthcare is sustainable implementation of reform initiatives, whether they be macro, meso or micro level in scope. In this chapter, we introduce the special issue of the Journal dedicated to implementation of MSK MoCs. We provide a contextual background on MoCs, a synthesis of implementation approaches across care settings covered across the chapters in this themed issued, and perspectives on the evaluation of MoCs.

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Introduction

The burden of disease of musculoskeletal (MSK) conditions is a global priority

The burden of disease of musculoskeletal (MSK) conditions at a global level is well established, evidenced most recently through the Global Burden of Disease (GBD) studies where the disability burden attributed to MSK conditions was observed to be enormous; exceeding all non-communicable diseases (NCDs) other than mental health and behavioural disorders [1,2]. These data point to the upward trajectory of prevalence and escalating personal and societal impacts of MSK conditions and persistent pain across the life course, further reinforced by recent nation-specific whitepapers and seminal reports [3–14,107]. Against a background of significantly reduced quality of life, function and mental wellbeing, a major human capital consequence of impaired MSK health is reduced workforce participation and early retirement [7,15,16]. Reduced participation has significant downstream consequences for retirement wealth for the individual, and upstream consequences for government, such as reduced taxation revenue and increased welfare payments in many nations [7]. In the context of low- and middle-income economies and subsistence communities, MSK-related disability results in reduced capacity for work participation and therefore a critical threat to livelihoods. Importantly, while communicable diseases remain a large driver to disability-adjusted life years in low- and middle-income economies, the recent GBD data point to an increasing burden of NCDs, particularly MSK conditions, in low- and middle-income economies [17,18]. In this context, addressing the burden of disease for MSK conditions across economies and across the life course, and their unifying feature of persistent or recurrent pain, is indeed an urgent global priority [19]. Lim et al. (Chapter 3) explore the burden of disease challenges in low- and middle-income Asian economies. Approaching pain from a contemporary pain science perspective is also a priority for improving pain care.

The scale of the MSK burden and its sequelae present major challenges to which nations need to adequately respond. Although the World Health Organisation (WHO) has developed a guide for nations to assess their policy and programme capacity to respond to NCDs, the guide considers only cancer, lung diseases, diabetes and cardiovascular disease [20]. Similarly, the WHO 2013–2020 Global Action Plan for the Prevention and Control of Non-Communicable Diseases [21] focuses on cardiovascular diseases, cancer, chronic respiratory diseases and diabetes, although MSK conditions remain within its scope. Recently, the European Region of the WHO released an action plan for the prevention and control of NCDs in the WHO European Region. For the first time, this Plan included musculoskeletal health as a priority intervention area [108]. Support for nations to develop and sustainably implement system response capacity is needed. This issue of the journal tackles these challenges across different economic and care settings to provide readers with evidence-informed, practical guidance.

Big problems need big solutions

MSK health outcomes are influenced by a range of factors: health system and public health factors (*macro* level), service delivery factors (*meso* level) and clinician and consumer behaviours (*micro* level) [19] (Table 1). These factors are discussed further in detail across the various chapters in this issue of the journal. Despite a large volume of evidence for 'what works' to address MSK health impairments and their sequelae, these evidence-based strategies are inadequately applied in practice by health providers [22–25], inadequately integrated into lifestyle behaviours by health consumers [26–28] and featured in health policy and health service delivery objectives at a level grossly incommensurate with the burden of disease [29–33]. To effectively and sustainably address the burden of disease of MSK conditions, a multi-level response is required, where macro-, meso-, and micro-level factors need to be considered in an integrated manner [19]. As outlined in the various chapters in this issue of the journal, a multi-level response is necessarily a complex intervention that demands a cross-sector, multi-disciplinary and a partnership-driven approach, supported, where feasible, by governments. Here, Models of Care (MoCs) provide one possible vehicle to drive effective change [19,30,34–36].