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Review Article

Untangling Ambiguity: What is a Primary Health Care-Oriented Model of Care?

Deena Al Asfoor[1*], Tobias Kasper[2], Hamid Ravaghi[1], Awad Mataria[1*]

[1]*EMRO-World Health Organization, Cairo, Egypt.*
[2]*St Jude Children Research Hospital, Tennessee, USA*

Correspondence
Deena Al Asfoor
Muscat- Sultanate of Oman.

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Abstract

Despite being at the top of the UN Agenda, Universal Health Coverage (UHC) is a challenging goal for countries. Empowering countries to progress towards UHC involves prioritizing the primary healthcare approach, for which Models of Care is one important lever that is vaguely understood.

In this paper, we discuss the Models of Care, which refer to the way in which health services are organized and delivered, including the processes of care, the organization of providers, and the management of services.

Elements that make up a macro-level care model include: 1) Population: the groups eligible for health services; 2) Services: the types and range of services offered; 3) Service design or delivery platforms: the platforms such as primary, secondary, tertiary, and community, along with their roles, functions, and definitions; 4) Service organization and management: including care pathways, which involve organizing services—covering empanelment, first-contact access, and gatekeeping—and managing facilities and administrative systems; 5) Community engagement: involving patient groups and community health workers, empowering participation through health education, shared decision-making, and other methods; and 6) Financing model: a flexible, fit-for-purpose structure that supports the health system effectively to create a supportive environment for MoC.

As outlined, the components of a Model of Care can provide a structured framework for countries aiming to evaluate their health systems, enhance access to healthcare and financial protection for their populations, and optimize resource utilization. Detailed guidance based on these components can serve as a clear benchmark for implementing a custom national MoC.

Highlights

- *Models of Care (MoC), as an operational lever in the PHC operational framework, refer to how health services are organized and delivered, including the processes of care, provider organization, and service management.*
- *Based on country and regional experience, we describe six interconnected elements of MoC.*
- *The guidance on MoC helps standardize health services planning and provides a benchmark for country comparisons and improvement.*

Background

Universal Health Coverage (UHC) means that all people have access to the full range of quality health services they need, whenever and wherever required, without financial hardship [1]. The goal of achieving UHC by 2030, set by the UN, remains challenging, especially for low- and middle-income countries, particularly those affected by conflicts and other emergencies, such as several countries in the WHO Eastern Mediterranean Region. The WHO and World Bank's 2023 UHC Global Monitoring Report revealed significant global inequities in UHC, as data indicate that, even before the COVID-19 pandemic, UHC was falling short of the progress needed to meet the 2030 target. While most countries experienced stagnation in their service coverage index from 2000 to 2021, the incidence of catastrophic out-of-pocket (OOP) health spending worsened in 64 countries. In the Eastern Mediterranean Region, catastrophic OOP at the 10% threshold increased from 9.9% in 2000 to 12.1% in 2019. Impoverishment OOP at the relative poverty level increased from 14% in 2000 to 15% of the regional population in 2019, while progress in OOP at the extreme poverty line decreased from 25% to 5% of the regional population at the same time [2].

The Primary Health Care (PHC) approach is considered the foundation of an effective health system. However, implementing efficient

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and equitable PHC faces many challenges, including unequal public spending that benefits the wealthy, fragmented care with limited continuity and coordination, and a focus on costly, specialized services instead of fair and affordable primary care. In areas where development aid is the main funding source, these problems are even more severe, further marginalizing vulnerable populations [3].

WHO developed an operational framework to guide implementation of the PHC approach. It is structured around four strategic and ten operational levers, assisting countries to strengthen their PHC system toward universal health coverage and other health-related Sustainable Development Goals. The strategic levers include: political commitment and leadership, governance and policy frameworks, funding and resource allocation, and community and stakeholder engagement. The operational levers are: 1) models of care, 2) primary health care workforce, 3) physical infrastructure, 4) medicines and other products, 5) engagement with private sector providers, 6) purchasing and payment systems, 7) digital health technologies, 8) systems to improve quality of care, 9) primary health care research, and 10) monitoring and evaluation. Countries are advised to tailor the PHC approach to their local context and align it with their specific needs, priorities, resources, and health system realities [4].

Despite numerous initiatives and publications discussing what constitutes a Model of Care (MoC) and its relevance to the PHC approach, country experiences reveal a limited understanding of the concept and a lack of consensus on how to bring a MoC into practice. In this paper, we aim to share a definition of the MoC as employed in EMR Member States and identify its elements to inform implementation efforts, providing greater conceptual clarity and practical guidance for implementing MoCs, ensuring PHC orientation [5,6].

What is a Model of Care?

Models of Care, as an operational lever in the PHC operational framework, refer to the way in which health services are organized and delivered, including the processes of care, the organization of providers, and the management of services.

A WHO scoping review identified 50 named models of care that span macro and meso levels. Meso-level MoCs are applied at the national, sub-national, district, or local levels and aim to organize care for a specific condition or target population group. Conversely, macro-level MoCs focus on a system-wide approach and emphasize family-health-oriented, integrated, or people-centered care. The review suggested that national MoCs require more precise articulation and need strong political commitment, dedicated resources, and practical, coordinated plans for the incremental implementation, financing, and monitoring of MoC components. An effective MoC should be comprehensive, integrated, person-centered, community-oriented, primary-care-based, focused on continuity, integrated with public health, well-designed, organized, and managed, high-quality, technology-enabled, adaptable, and resilient, and explicit in empowering stakeholders [7].

We assert that each country has at least one MoC ; if not more, depending on how services are organized and managed locally. However, delivering optimal care and achieving UHC depends on continuous review and improvement to enhance effectiveness, equity, and efficiency. It is also essential to focus on providing high-quality primary care, establishing strong connections among primary, secondary, and tertiary care levels, and ensuring coordination and continuity of care, with primary care serving as the first point of contact and gateway to the health system. Furthermore, a MoC should include mechanisms to monitor patients' progress along clinical pathways, emphasizing the work of multidisciplinary teams; it must align with the population's health goals and priorities, and effectively implement the core strategic levers, ultimately improving the health system's performance. In summary, a 'Model of Care' can be defined as a representation of how health services are selected, designed, organized, delivered, managed, and supported by different service delivery platforms [4,5,8-10].

Designing a PHC-Oriented Model of Care:

The pathway for a health system reform focusing on MoC should include reviewing its current components, identifying gaps, and making improvements. In this section we describe six interconnected elements of macro level MoC: 1) Population (who and for whom), 2) Services (what or which benefits), 3) Service Design or delivery platforms (how many levels and their nature), 4) Service Organization (pathways), 5) Community Engagement, and 6) Financing Model (revenue raising, pooling and purchasing) [8].

Population (who and for whom):

Understanding the characteristics of the target population is crucial for shaping a feasible MoC and allocating resources efficiently. The distribution of services depends on the size of the population in need, taking into account factors such as morbidity and mortality patterns, geographic distribution, socioeconomic status, and health-seeking behaviors. Service prioritization should also consider vulnerable and disadvantaged groups (e.g., residents of rural and remote areas, individuals living under extreme poverty, women and children, refugees, migrants), disease patterns, and civil status (e.g., national citizens) [11].

Services (what or which benefits)

At the regional level, the WHO has been recommending the delivery of health interventions, services, and programs as a package, known as the Universal Health Coverage Package (UHC-P), to ensure access for the entire population throughout their life course, supported by various financial protection mechanisms [12]. Each country needs to develop its own package, guided by evidence on population needs as well as morbidity and mortality patterns. To assist countries in developing such packages, the WHO Regional Office for the Eastern Mediterranean (EMRO) advises a three-phase process that includes: preparation (advocacy and awareness, organizational structure and coordination, stakeholder engagement), development (situation analysis, data and evidence, decision), and implementation (communication, institutionalization, management, monitoring and evaluation) [12]. This approach emphasizes evidence, context specificity, equity, transparency, and stakeholder engagement and has been applied in several countries. Complementary work by WHO EMRO on costing highlighted the importance of estimating existing and incremental costs as well as addressing inefficiencies, which are critical steps for advancing health system reforms and standardizing national MoC [12-15].

Service Design (the platforms):

Defining the service delivery platforms ensures clarity of where services will be delivered – at which level of the health system – and helps identify the necessary resources and costs. It helps develop a well-defined and clear package of services, facilitating their effective implementation.

Each service delivery platform needs to be identified, and its roles and functions need to be clearly defined and contextualized. While most countries have primary, secondary, and tertiary care platforms, the names and roles of these platforms can vary significantly. In Syria, for example, primary care facilities are classified into A, B, and C, each with specific functions, in addition to mobile clinics. In contrast, the UAE provides health services through four levels: community health centers, primary care centers, community and general care hospitals, and specialized and tertiary care hospitals [16].

Service organization and management (the pathways):

Service organization and management, or care pathways, define the structuring of services across different levels and the mechanisms for coordinating and overseeing their delivery, with the aim of ensuring continuity, efficiency, and accountability. Care pathways include two major topics: service organization and service management. The following sections discuss the components of each topic in detail.

The service organization addresses empanelment, first-contact accessibility, and gatekeeping. Empanelment is a continuous and iterative process that identifies and assigns populations to facilities, care teams, or providers responsible for proactively delivering coordinated primary care services [17].

Once the population is empaneled, the designated health facility should act as the first point of contact for most health needs of the empaneled individuals. This is called "First contact accessibility" and is a key function to improve service effectiveness. Meanwhile, primary care physicians in those facilities manage patients' access to specialty, emergency, and hospital services, prioritizing those who need care most and reducing the workload for higher levels of care through their gatekeeping role. Empanelment, first-contact accessibility, and gatekeeping work together to ease the strain on both financial and human resources, while also improving timely and equitable patient management. While empanelment and gatekeeping are primarily health system functions, first-contact accessibility is influenced by geographical, organizational, and cultural barriers, as well as issues related to information, affordability, and the availability of services and medications. Addressing these challenges requires clear procedures and guidance to monitor and strengthen first-contact accessibility [18-22].

Beyond accessibility and gatekeeping, service organization must also integrate supportive programs within facilities to ensure care is patient-centered and culturally appropriate. This includes integrating traditional and complementary medicine where relevant, implementing clinical and patient/family support tools, educational resources, and mechanisms that ensure the voices of patients and their families are heard [23-25].

Health services management complements service organization and involves the management of facility functions and administrative systems, aiming to ensure efficient and seamless patient flow within and between health system facilities. It includes reporting lines, clear scopes of authority, communication channels, job descriptions, quality assurance, and supportive supervision [11].

Service management also involves arranging services within a facility, such as through multidisciplinary teams addressing various aspects of patient care, and linking community health workers with health facilities to extend reach. The scope and roles of each level of care should be clearly defined to ensure a patient flow that emphasizes accessibility, efficiency, comprehensiveness, continuity of services, and patient-centered care. Management functions also encompass patient registration and reception, triage and risk assessment, general consultation, diagnostics, medication provision, and administrative services [11].

In parallel, effective management of services requires standardized clinical pathways that translate evidence into practice and support consistent quality of care. The clinical care pathways outline the steps in the treatment process through a plan, pathway, algorithm, or protocol, aiming to standardize care for a given clinical issue or procedure for a particular population. Clinical care pathways encompass risk categorization, clinical management procedures, communication channels (including referral and counter-referral), and coordination between care levels, as well as follow-up guidelines. The development or review of these pathways should involve a participatory approach, which enhances ownership and cost-effectiveness [26].

In addition, outreach services, including community-delivered care and civil society engagement, extend service delivery into the community through public providers, the private sector, NGOs, home caregivers, and self-care. Each contributes differently, but coordination among them is essential to ensure continuity of services and quality. Aligning the private sector's engagement with national policies and directions is key, ranging from data sharing and training to service purchasing and full public-private partnerships [11,27].

Finally, intersectoral coordination strengthens service delivery. This includes developing and implementing health-in-all policies, establishing intersectoral partnerships, and integrating the health sector into social services. It also emphasizes collaboration with the education and agricultural sectors, incorporating traditional and complementary medicine into formal health systems, and coordinating preparedness and response efforts for health crises [28].

Community linkages and engagement

Community engagement is a vital element of the MoC, allowing communities to express needs, set priorities, and build trust. It involves regular participation in health needs assessment, planning, implementation, and evaluation. Inclusive health committees that include marginalized voices help shape priorities and service design, while community health worker programs act as bridges between formal health services and communities [3].

Social accountability tools, like feedback systems, enable communities to monitor service quality and hold providers accountable. Collaborations with civil society and community organizations strengthen networks and resources for health promotion and service delivery. Services promoting self-care and health literacy in primary care empower and involve individuals and families through health education, shared

decision-making, self-management training, guidance on navigating the health system, and patient satisfaction surveys [29-31].

Additionally, technology is transforming health education and behavioral change, significantly improving access and strengthening community connections and involvement through innovative approaches [32-34].

Financing

Financing is an essential aspect of health service delivery, and it is important to understand whether the health financing arrangements are fit-for-purpose and flexible enough to support the desired MoC. It may not be necessary to increase the budget, but a shift in allocation is likely to be required once the MoC has been established [8].

Improvement in approaches to strategic purchasing:

Strategic purchasing involves pooling funds and linking them to provider performance, population needs, and expenditure growth. These funds are then allocated to healthcare providers to deliver health services for specific groups or the entire population. It also considers the design of provider payment mechanisms and contractual arrangements. Strategic purchasing aims to enhance efficiency, equity, quality, and fairness in healthcare delivery and should be regularly evaluated and aligned with the country's overall health goals and resources 35. Managing procurement, payroll, and contracting; improving hospital management; and establishing optimal pathways for diagnosis and treatment can support strategic purchasing and improve the efficiency of the health system.

Introduce empanelment linked to provider payment:

Capitation involves paying the service provider a fixed amount per patient for a defined set of healthcare services, which can improve equity and control costs. Additionally, pooling funds from various stakeholders, including UN agencies and local NGOs, and sourcing financial support for infrastructure and trusted local providers can also boost momentum and improve the sustainability and efficiency of PHC [36].

Conclusion

Each country has some form of a Model of Care, whether implicit or explicit, fragmented or unified. The challenge remains in understanding the extent to which the model fulfills policy makers' objectives and people's expectations for delivering high-quality, equitable, and comprehensive health care under UHC. Despite extensive knowledge of the elements of a Model of Care, interactions with countries reveal gaps in integrating these elements and in creating a roadmap to progress towards the design and implementation of a PHC-oriented MoC. EMR countries, such as Pakistan, Jordan, Palestine, and Iraq, expressed interest in technical support and guidance on developing and implementing an MoC.

The strategic approaches necessary to reshape MoC involve setting service priorities based on the life course approach, emphasizing promotion, prevention, and public health, developing primary care-focused systems, shifting towards outpatient and ambulatory care, and adopting new technologies [28].

Models of Care have been debated in the literature, and various authors have offered different interpretations of the concept. We are not attempting to unify the meaning of a MoC in this paper, but rather to present a perspective on a national, multi-level model of care that supports countries aiming to transform their health systems using an evidence-informed approach and drawing on country experiences.

A successful care model begins with selecting and planning services, which involves identifying the population in need, defining delivery platforms, and developing a UHC package of health services. Next, the country should organize the health services and communication among and within stakeholders. Finally, managing the system includes establishing reporting and communication channels and defining the roles and responsibilities of the health workforce. Financing, along with monitoring and evaluation, is vital to supporting the system's sustainability, efficiency, accountability, equity, and fairness.

There is no one-size-fits-all approach to a successful Model of Care; the components outlined here should be translated into practical guidelines that can mainstream the pathway to a UHC, and they should be adapted and implemented based on each country's local context, resources, and challenges. Success relies on political commitment, adequate resources, active stakeholder engagement, and continuous adaptation.

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