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(REVIEW ARTICLE)

Institutional alignment without full functional transition: Primary health care reform in Greece since 2017: A narrative review

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Abstract

Primary Health Care (PHC) is internationally recognized as a foundational pillar of effective, equitable, and sustainable health systems. In Greece, however, PHC has historically evolved through fragmented institutional arrangements, resulting in persistent challenges related to coordination, continuity of care, and population-based service delivery. In response to these long-standing structural characteristics, a comprehensive PHC reform was introduced in 2017, aiming to align national primary care organization with internationally endorsed PHC principles.

This narrative review examines whether the institutional alignment achieved through the 2017 reform was accompanied by a corresponding functional transformation in PHC service delivery. The analysis draws on national legislation, policy documents, and international PHC literature, and analytically distinguishes between institutional design and operational outcomes across key dimensions, including governance arrangements, workforce capacity, accessibility, coordination, continuity of care, preventive activities, and financing mechanisms.

The findings indicate that while the 2017 reform achieved substantial institutional convergence with international PHC models, functional transformation remained partial and uneven. Implementation was characterized by regional variability, workforce shortages, limited operational integration of preventive and health promotion services, and persistent challenges in care coordination and continuity. These patterns are consistent with international evidence suggesting that legislative and organizational redesign alone is insufficient to ensure effective functional change in primary care systems.

By situating the Greek experience within the broader international PHC policy framework, this review contributes to comparative health system analysis by illustrating how institutional reforms are mediated by system capacity and implementation dynamics. The article highlights the importance of sustained alignment between institutional arrangements and operational conditions and offers analytically transferable insights relevant to health systems pursuing PHC strengthening under comparable structural, organizational, and fiscal constraints.

Keywords: Primary Health Care; Health System Reform; Institutional Design; Functional Outcomes; Health System Governance; Greece

1. Introduction

Primary Health Care (PHC) is widely recognized as a cornerstone of effective, equitable, and sustainable health systems, encompassing disease prevention, treatment, and the promotion of physical, mental, and social well-being

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(Michalopoulos, Maniou & Zografos, 2012; Maniou et al., 2019). Serving as the first point of contact within the health system, PHC provides accessible, comprehensive, and coordinated services throughout the life course (Bruyère et al., 2020; Zagouri & Maniou, 2016).

The principles of PHC were formally articulated in the Declaration of Alma-Ata (1978), which emphasized health as a fundamental human right and highlighted universality, accessibility, intersectoral action, and community participation (Maniou et al., 2011;). These principles were reaffirmed in the Declaration of Astana, which positioned PHC at the core of universal health coverage and the Sustainable Development Goals, emphasizing its enduring role in addressing complex population health needs (Roupa et al., 2004; Roupa et al., 2009;Roupa et al., 2010 ; Salakos. et al.,2004.)

Despite international consensus, the evolution of PHC varies across national contexts. In Greece, PHC has historically been shaped by successive legislative and organizational arrangements, resulting in institutional fragmentation and limited continuity of care (Maniou, 2024). While multiple reforms sought to strengthen PHC within the National Health System, challenges remain regarding integrated planning, resource allocation, and the balance between primary and hospital-based care (Maniou et al., 2019).

In response to these long-standing structural issues, the Greek government introduced a comprehensive PHC reform through Law 4486/2017. The reform aimed to expand primary care structures, introduce population responsibility, strengthen the role of the family physician, and promote multidisciplinary health teams (Maniou, 2024). While this institutional design aligned Greek PHC with internationally recognized principles, its translation into functional improvements across service delivery remains under evaluation.

This narrative review examines the extent to which the 2017 reform achieved a coherent and sustainable functional transition in PHC service delivery, focusing on areas such as needs assessment, service accessibility, workforce capacity and distribution, coordination and continuity of care, financing, and preventive activities (Zagouri & Maniou, 2016; Roupa et al., 2000). By linking institutional design to functional outcomes, the review contributes to understanding the conditions under which PHC reforms can achieve substantive, system-level impact. Maniou, et al., 2025.

2. Conceptual and Policy Framework of Primary Health Care

Primary Health Care (PHC) is internationally conceptualized not merely as a level of service provision, but as a comprehensive policy framework shaping the organization, priorities, and performance of health systems. Central to this framework is the recognition that health systems oriented toward PHC aim to promote equity, improve access, and ensure continuity and coordination of care across populations and life stages (WHO, 2023; Boerma et al., 2015). In this sense, PHC constitutes a normative model that integrates clinical services with public health functions, community engagement, and intersectoral action (WHO & UNICEF, 1978; WHO, 2018).

According to the World Health Organization, PHC is grounded in core principles defining its role within health systems, including first-contact accessibility, person-centred and comprehensive care, continuity over time, coordination across levels of care, and accountability for defined populations (WHO, 2023). When effectively implemented, these principles contribute to improved population health outcomes, reduced avoidable hospital use, and more efficient allocation of resources (Boerma et al., 2015). Importantly, these principles function both as aspirational goals and as evaluative criteria for assessing PHC performance (WHO, 2023; Boerma et al., 2015).

The evolution of the PHC paradigm from the Declaration of Alma-Ata to the Declaration of Astana reflects continuity rather than rupture in international health policy thinking. Alma-Ata emphasized universal access, community participation, and social determinants of health, while Astana reaffirmed these values within contemporary challenges such as demographic ageing, rising chronic conditions, and increasing system complexity (WHO & UNICEF, 1978; WHO, 2018). This evolution underscores the need for PHC systems that are resilient, adaptable, and responsive to diverse population needs (Lawn et al., 2008; Boerma et al., 2015).

From a policy perspective, PHC requires sustained investment in infrastructure, adequate and appropriately distributed human resources, governance mechanisms supporting coordination and integration, and information systems enabling performance monitoring and evaluation (Boerma et al., 2015; Patras, 1969; Doxiadis, 1981; Greek Law 1397/1983). Without these enabling conditions, alignment with PHC principles at the institutional level may remain largely symbolic, with limited impact on service delivery (Boerma et al., 2015; Greek Law 1397/1983).

Within this analytical framework, PHC reforms can be examined by assessing the extent to which institutional arrangements enable operationalization of core principles in routine practice. International and European health policy

analyses highlight that PHC principles function as normative goals and as evaluative criteria for comparing intended policy objectives with observed functional outcomes (WHO, 2023; WHO, 2018; Boerma et al., 2015). This framework provides the conceptual basis for analyzing the Greek experience before and after the 2017 reform, focusing on the relationship between institutional configuration and operational performance of PHC services.

3. Structural Characteristics of Primary Health Care in Greece before 2017

Prior to the 2017 reform, Primary Health Care in Greece was shaped by a long history of incremental and often fragmented institutional development. From the early post-war period, PHC services were introduced through successive legislative initiatives, frequently responding to immediate needs rather than a coherent long-term strategy (Ellinas, 2002; Greek Law 2592/1953; Greek Law 1397/1983; Greek Law 1579/1985; Greek Law 2071/1992). Although these interventions expanded service provision, they did not establish an integrated PHC system with clearly defined roles, responsibilities, and population-based accountability.

A defining feature of the pre-2017 period was the coexistence of multiple organizational arrangements within PHC, operating under different administrative and financing frameworks (Greek Law 2194/1994; Greek Law 2519/1997; Greek Law 3235/2004). This institutional plurality resulted in limited coordination between services, overlapping competencies, and variability in service delivery across geographical areas. Consequently, continuity of care and systematic follow-up for chronic conditions were difficult to achieve.

Governance arrangements during this period were complex and fragmented, with responsibilities for planning, service provision, and oversight distributed across multiple administrative levels and actors, without stable mechanisms for horizontal or vertical coordination (Pierrakos, 2008; Yfantopoulos, 1988; Kyriopoulos et al., 2007). In the absence of unified governance structures, PHC services were weakly connected to broader public health planning and to secondary or tertiary care, limiting their capacity to function as coordinators of care pathways.

Financing patterns further reinforced the hospital-centered orientation of the Greek health system. Public expenditure historically prioritized secondary and tertiary care, while investment in PHC infrastructure, preventive services, and community-based interventions remained comparatively limited (Naoum, 2020; Kyriopoulos et al., 2007). As a result, hospitals frequently absorbed demand that could have been addressed at the primary care level.

Human resource capacity represented another critical structural limitation. Shortages of general practitioners and uneven geographical distribution of health professionals were recurrent issues, particularly affecting rural and underserved areas (Greek Law 3868/2010; Greek Law 3918/2011). Limited institutionalization of multidisciplinary teamwork further restricted the development of comprehensive and person-centred care models, undermining PHC functional capacity and contributing to disparities in access and quality of care (OECD, 2020; WHO, 2021).

Taken together, these structural characteristics reflect a system characterized by fragmentation, limited coordination, hospital-centered financing patterns, and constraints in workforce distribution. Understanding this pre-reform context is essential for interpreting the objectives and institutional design of the 2017 reform and for assessing the extent to which subsequent structural changes could translate into functional transformation of PHC services (Greek Law 3235/2004; Greek Law 4238/2014; Meggouli, 2019).

Concluding this section, we emphasize the significance the role of education and of digital technologies in the field of health care, which is highly effective and productive, facilitates and improves assessment, intervention, and educational procedures via mobile devices that bring educational activities everywhere [43-44], various ICTs applications that are the main supporters of education [45-49], and games based education that raise educational procedures to new performance levers [50-52]. Additionally, the development and integration of ICTs with theories and models of psychology (metacognition, mindfulness, and emotional intelligence) [53-57] accelerates and improves the educational practices and results in the domain of health care.

4. The 2017 Primary Health Care Reform: Institutional Design and Policy Objectives

The 2017 reform of Primary Health Care in Greece, enacted through Law 4486/2017, represented a comprehensive institutional reconfiguration of primary care within the National Health System (Greek Law 4486/2017; Naoum, 2020). The reform aimed to establish a coherent organizational framework aligned with internationally endorsed PHC principles, responding to longstanding structural limitations. Rather than introducing isolated adjustments, it sought to

redefine PHC as a central component of service delivery, with responsibility for population-based care and coordination across health system levels (OECD, 2020; WHO, 2022).

A key aspect of the reform was the creation of defined Primary Health Care Sectors and the reorganization of existing health units within a unified framework (Greek Law 4486/2017; Greek Law 4238/2014). The institutional design emphasized geographical responsibility and population coverage, enhancing accessibility and continuity. Local Primary Health Care Units were introduced as frontline contact points, operating alongside Health Centres and other PHC facilities to reduce fragmentation and promote systematic service delivery (Naoum, 2020; WHO, 2023).

The reform also emphasized the role of the family physician as a care coordinator, responsible for patient registration, first-contact care, and referral management (Greek Law 4486/2017; OECD, 2020). In parallel, multidisciplinary health teams were formally established, including physicians, nurses, and other health professionals, reflecting international evidence on the importance of collaborative practice for comprehensive care delivery (WHO, 2022; WHO, 2023).

The scope of PHC services was explicitly expanded to include preventive care, health promotion, chronic disease management, basic mental health support, and selected home-based services. Core guiding principles such as universal access, equity, person-centred care, and continuity positioned PHC as a mechanism for strengthening both individual and population health outcomes (Greek Law 4486/2017; WHO, 2022).

Overall, the 2017 institutional reform established a policy framework and structural foundation designed to strengthen coordination, accessibility, and quality in PHC, laying the groundwork for subsequent evaluation of functional outcomes (OECD, 2020; WHO, 2021; WHO, 2023).

5. Functional Outcomes of Primary Health Care following the 2017 Reform

The 2017 reform in Greece established a structured framework for PHC aligned with international principles, yet functional outcomes varied across regions (OECD, 2020; WHO, 2021). Implementation of new PHC units and reorganization of existing ones progressed unevenly, reflecting differences in administrative capacity and workforce distribution (WHO, 2021; WHO, 2022). Systematic population needs assessment was limited, and service planning often relied on pre-existing administrative patterns rather than epidemiological data (WHO, 2022; WHO, 2023). Access to PHC remained inconsistent, particularly outside standard hours, sustaining reliance on hospitals and private care (OECD, 2020; WHO, 2023). Workforce shortages, especially of family physicians and nurses, constrained multidisciplinary team functioning and continuous care delivery (WHO, 2022; WHO, 2023). Coordination between PHC units and secondary care was variable, affecting referral processes and chronic disease management (WHO, 2021; WHO, 2022). Fragmented financing and limited preventive program implementation reduced investments in health promotion and community-based services (OECD, 2020; WHO, 2022). Immunization campaigns were inconsistently monitored and executed (WHO, 2022; WHO, 2023). Overall, despite structural improvements, operational gaps in workforce, planning, coordination, and preventive activities limited the full realization of PHC objectives (WHO, 2021; WHO, 2022; OECD, 2020).

6. Conclusions and Implications for Primary Health Care Systems

The 2017 PHC reform in Greece achieved substantial institutional alignment with international principles, yet functional transformation remained partial and uneven (Boerma et al., 2015; Lawn et al., 2008; WHO, 2022). Legislative and organizational redesign alone proved insufficient to improve accessibility, coordination, or continuity of care (WHO, 2023). Governance complexity, fragmented responsibilities, and systemic constraints limited PHC's integrative role (Boerma et al., 2015; WHO, 2022). Workforce shortages, uneven distribution, and incomplete multidisciplinary teams reduced service delivery effectiveness (OECD, 2020; WHO, 2021; WHO, 2022). Fragmented financing and misalignment with population health needs restricted preventive services and broader PHC functions (OECD, 2020; WHO, 2022). Persistent operational gaps reflect systemic conditions rather than isolated implementation failures (WHO, 2023). Translating institutional provisions into routine practice is mediated by governance, workforce, financing, and local implementation dynamics (Boerma et al., 2015; Lawn et al., 2008; OECD, 2020; WHO, 2021; WHO, 2022; WHO, 2023). PHC reform should be seen as a long-term, adaptive process requiring iterative evaluation, capacity building, and continuous alignment of structures and processes (WHO, 2023). Sustainable functional gains depend on integrated governance, adaptive workforce planning, and resource allocation matched to population needs (WHO, 2022). The Greek experience highlights the critical role of contextual factors—fiscal constraints, structural workforce limitations, and governance complexity—in shaping reform outcomes (OECD, 2020; WHO, 2022). Lessons from Greece provide relevant insights for other health systems pursuing primary care strengthening under similar conditions. Overall,

effective PHC requires not only institutional design but sustained operational support and systemic adaptation (Boerma et al., 2015; WHO, 2022).

Compliance with ethical standards

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Disclosure of conflict of interest

The Authors proclaim no conflict of interest.

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