

Comprehensive Review of Universal Healthcare Issues and Innovations

Fatima Essa Saad Alqahtani¹, Norah Salem Alqahtni², Sultanah Faraj Abdullah Al Shahrani³, Abdul Rahman Mohsen Yahya Zabr⁴, Meshari Mohsen Yahya Zabr⁵, Mahdi Salem Habban Alzulaiq⁶, Ghuzayyil Munahi Saad Alshamrani⁷, Fatimah salem Aayed Alqhtani⁸, Fouzeah Issa Alqhtani⁹, Hamaid Saud Alhurais¹⁰

Abstract

The international healthcare environment of today is undergoing significant changes, with the introduction of UHC as a concept to address the gaps in fair, quality, and cost-efficient healthcare access. This literature review examines the nature of challenges that continue to arise in universal healthcare systems and the new solutions being implemented to address them. This review focuses on the impact of UHC over time across various nations, ranging from developed to developing countries, the purpose of which is to identify the challenges and practical, economic, and social considerations that may hinder the implementation of UHC as well as the strategies of innovation driving the advancement of UHC. The study identifies several trends, such as technological solutions in healthcare, changes in payment systems, reforms, and movements toward integrated health information technology. These approaches hold great potential for enhancing healthcare delivery's efficiency, scope, and viability worldwide.

Keywords: *Universal Healthcare, Health Innovations, Health Access, Financing Models, Healthcare Delivery, Global Health, Digital Health, Health Equity, Policy Reforms, Sustainable Health Systems.*

Introduction

Called for by the United Nations, universal health care is the concept deemed a part of rights, implying that when people needing healthcare services have to pay heavily, they are denied their rights. However, there is a hidden problem with implementing Universal Health Care (UHC) today and in the future. Many developed countries, including the USA and other OECD countries, have faced high expenses due to the implementation of this system. Technological advancements such as digital health, emerging financing models, and value-based care have provided opportunities to overcome these challenges. This review seeks to establish the major concerns of universal health care and assess the contemporary developments that may define advances in world health reform (Mohammad et al., 2024a; Mohammad et al., 2023a; Mohammad et al, 2024b).

Literature Review

1. The Concept and Importance of Universal Healthcare

The UHC model aims to provide increased access to essential health care, regardless of the patient's ability to pay for these services. This model puts the principle into practice that everyone can obtain proper medical treatment irrespective of their income level, access to health care services, and other related issues.

¹ Ministry of Health, Saudi Arabia; Fealqahtani@moh.gov.sa.

² Ministry of Health, Saudi Arabia; Nalqahtani10@moh.gov.sa.

³ Ministry of Health, Saudi Arabia; sfalsharani@moh.gov.com.

⁴ Ministry of Health, Saudi Arabia; Azabr@moh.gov.sa.

⁵ Ministry of Health, Saudi Arabia, mzabr@moh.gov.sa

⁶ Ministry of Health, Saudi Arabia, malzulaiq@moh.gov.sa

⁷ Ministry of Health, Saudi Arabia, Galshmrane@moh.gov.sa

⁸ Ministry of Health, Saudi Arabia, fatmhsa@moh.gov.sa

⁹ Ministry of Health, Saudi Arabia, Fiqahtine@moh.gov.sa

¹⁰ Ministry of Health, Saudi Arabia, Haalmotary@moh.gov.sa

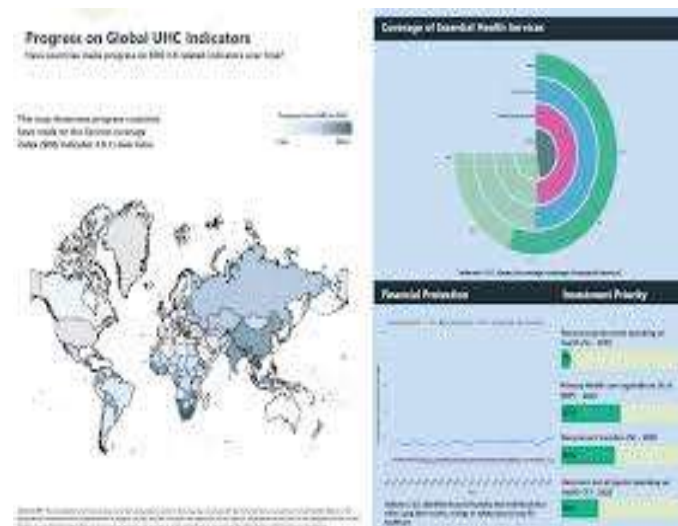
Following the WHO, the UHC lies at the heart of health equity and the betterment of the population worldwide. We have noted that the presented model reflects the basic tenets of the United Nations Sustainable Development Goal 3—Health and Well-being for all ages.



(Gotsadze & Anaraki, 2018)

Although achieving the concept of health for all is well understood, its endpoint differs from country to country depending on national income, political will, available health infrastructure, and the socioeconomic condition of people who will benefit from it. Most of the developed countries today have successfully implemented the concept of UHC. However, the LMICs are still grappling with major challenges in implementing a coherent and sustainable UHC reform agenda. Examining general trends in UHC implementation, identifying common challenges nations encounter in implementing the concept and exploring innovative solutions to address these challenges are all necessary.

Global Trends in UHC Implementation



(Gotsadze & Anaraki, 2018)

1. High-Income Countries

Nations with high average incomes per citizen, such as the USA, Great Britain, and Canada, have highly effective processes for organizing state-funded healthcare for all populations. These nations will show how

UHC has been attained in developed economy nation-states. Their systems include taxed or premium-based insurance, strong healthcare delivery systems, and policies that strategize for equitable healthcare facilities.

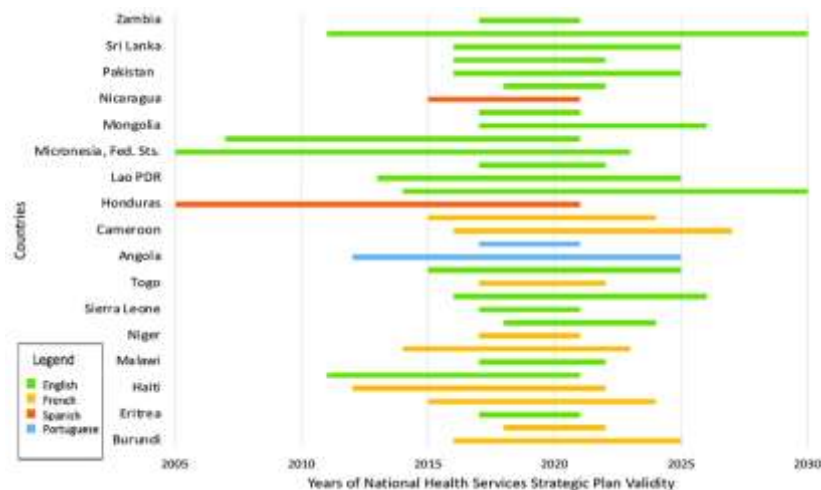
Major health insurance programs administered by the provinces and territories finance health care in Canada. This ensures that essential healthcare services are accessible to all residents without direct costs, resulting in most residents enjoying good health. Experts attribute it to reducing disparities in medical services among individuals and improving the population's overall health. Another example of protectionism is Great Britain, whose National Health Service (NHS) provides all the inhabitants of the UK equal access to health care services gratis and financed by general taxation. The NHS exemplifies the effective implementation of equity in healthcare access (Mohammad et al., 2023b; Al-Hawary et al., 2020; Al-Husban et al., 2023).

Japan has also successfully implemented UC, which encompasses employer-based insurance, government-subsidized insurance for the elderly, and individual insurance programs. The Japanese model preserves high healthcare quality and availability while keeping cost restraints, a feat that is tough even for developed nations.

2. Low- and Middle-Income Countries (LMICs)

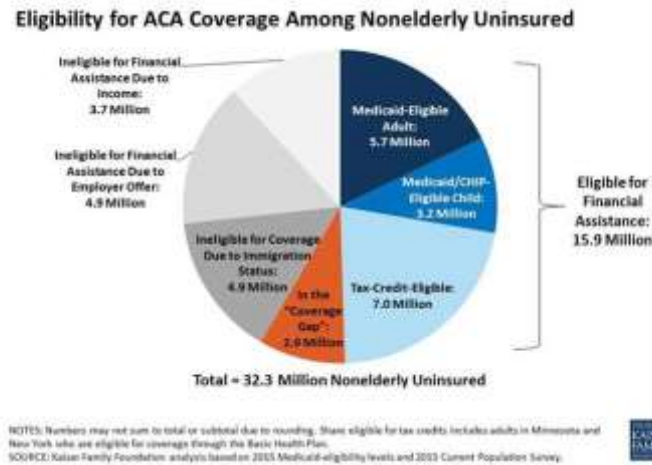
On the other hand, the majority of LMICs experience obstacles to achieving UHC, such as weak preconditions to support health sector development, narrow financial resources available for healthcare, and deficits in human resources for healthcare. However, due to one or more key strategies, some LMICs have made commendable attempts to meet UHC goals and objectives.

For instance, Thailand embraced UHC early in the 2000s, offering quality care services and minimizing financial hardships for its people. In recent years, the Philippines has witnessed a surge in healthcare availability, incorporating UHC principles into its national health policies. However, certain rural areas still lack sufficient resources. However, despite these achievements, glaring inequalities persist, particularly in rural areas where access to health care facilities is challenging.



(Saltman & Rico, 2016)

Common Issues in Universal Healthcare



(Swarup & Sharma, 2017)

1. Health Equity

Health equity is one of the major barriers to implementing UHC. Although all countries in the study had some form of universal health coverage, concerns of socioeconomic status, geographical location, and ethnicity influenced access to health care. Data regarding health service utilization demonstrates ethnic inequalities in many HICs, including ethnic minorities, immigrants, and the poor population.

The literature review also highlights the increased concern for health equity in LMICs due to the lack of access to necessary healthcare facilities for vulnerable groups such as rural areas and the poor. The efficient distribution of health interventions is not only ethically right but also an important strategy for realizing the full potential of UHC.

2. Financial Sustainability

As evident in the various graphical analyses, profitability and financial viability continue to be challenging for high-income countries and LMICs. All high-income countries meet the costs of UHC through out-of-pocket payments, such as taxation or premiums. However, as individuals age and their health needs rise, the costs of healthcare systems continue to rise. For most LMICs, the problem of sustainable financing is compounded by the lack of sufficient national budgets to finance the provision of healthcare and external funding sources for development assistance.

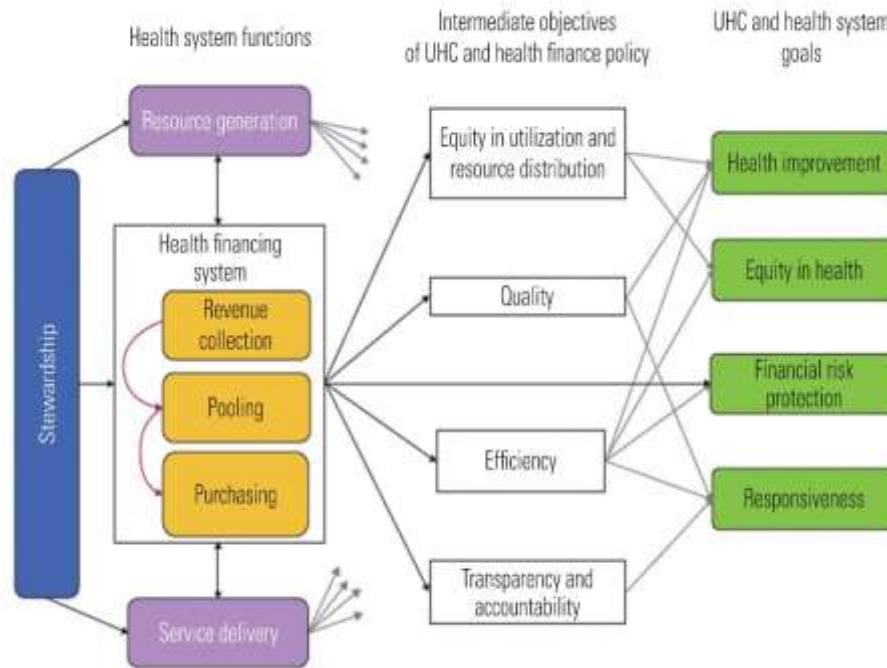
The ongoing rise in the cost of healthcare technologies and prescription drugs significantly burdens the financing of UHC systems. Out-of-pocket payments for services that are not reimbursable under public health insurance are a major problem in most LMICs, forcing those who cannot afford them into poverty and preventing them from using necessary health services.

3. Quality of Care

Consistency and quality of care ensure that quality care is now one of the core tasks in UHC, particularly in LMIC. Many countries have achieved increasing access but fail to deliver more capable healthcare because the systems revert to poor quality as they try to accommodate the increased client turnover (World Health Organization, 2015; Al-Nawafah et al., 2022; Alolayyan et al., 2018) These factors include congested healthcare facilities, poorly trained human resources, and inadequate or poor stock of medical equipment and various ancillary products, all crucial for delivering proper patient care.

Unfortunately, many resource-poor countries may have no or low standards for care, and there may be issues with the education and remuneration of human resources for health. The best ways to achieve better care are to increase public resources to support the system and redesign this complex process into a continuous and rational one.

Innovative Approaches to Address UHC Challenges



(Thompson & Morenoff, 2016)

1. Digital Health Technologies

Digital health technologies are proving to be an enabler in dealing with many issues in UHC systems. These technologies include electronic health records (EHR), telehealth/telemedicine, and mobile health (mHealth) applications that increase patient's access, optimize the health system's functioning, and decrease overall healthcare expenses.

- There has been increased adoption of telemedicine, especially in LMICs, mainly in areas that are hard to access. include electronic health records (EHR), telemedicine, and mobile health (mHealth) applications, which improve access to care, enhance health systems' efficiency and reduce healthcare costs.
- Telemedicine has gained significant popularity in LMICs, particularly in rural and remote areas with limited access to healthcare providers. In COVID-19, when it was impossible to visit doctors regularly, and healthcare infrastructure was poor in many countries, telemedicine helped people get medical assistance remotely.
- Different countries have employed mHealth to educate the public on health, conduct regular check-ups for chronic illnesses, and enhance the relationship between clients and doctors. Ine and mobile health (mHealth) applications improve access to care, enhance health systems' efficiency and reduce healthcare costs (Rannan-Eliya & Somanathan, 2015; Alzyoud et al., 2024; Mohammad et al., 2022; Rahamneh et al., 2023).

- Telemedicine has gained significant popularity in LMICs, particularly in rural and remote areas with limited access to healthcare providers. During the COVID-19 pandemic, telemedicine proved essential for providing healthcare remotely, especially in countries with limited healthcare infrastructure.
- Various countries have used mobile health apps (mHealth) to promote public health education, track chronic diseases, and facilitate communication between patients and healthcare providers. Such technologies can fill gaps between care delivery systems, especially in areas that have access to healthcare facilities.
- Electronic Health Records (EHR) enhance the process of the delivery of health care by organizing, reducing the incidence of errors, and ensuring that patient history is attainable in varied distinguished points of health. Mobile health (mHealth) applications improve access to care, enhance health systems' efficiency, and reduce healthcare costs.
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- Various countries have used mobile health apps (mHealth) to promote public health education, track chronic diseases, and facilitate communication between patients and healthcare providers. These technologies can bridge gaps in care delivery, especially in regions where physical access to healthcare facilities is difficult.
- Electronic Health Records (EHR) improve healthcare delivery by streamlining patient data management, reducing errors, and ensuring that medical history is accessible across different points of care. EHR systems are especially important for Canada, the UK, and Australia (Sivashankar & Raghuram, 2020).

2. Telemedicine and Mobile Health (mHealth).

With telemedicine and mHealth, there has been a great transformation in the delivery of healthcare services. For instance, the Indian health care system has used telemedicine to overcome geographical barriers. Mobile health platforms in sub-Saharan Africa have reduced maternal and child morbidity through the provision of enhanced consultancies and health literacy.

However, implementing telemedicine faces many barriers, such as low ICT literacy levels among patients and physicians, lack of access to the Internet, and the unavailability of a sound telecommunication network. To resolve these challenges, countries primarily focus on developing enhanced digital health systems and enhancing HCPs' telemedicine skills.

3. Public-Private Partnerships

In high-income countries as well as low-income ones, UHC has gained much value and expression through PPPs. PPPs imply that government funding is complemented by private sector knowledge to fix scarcities, enhance the quality of services, and encourage change.

For instance, the Brazilian government has recently formed a network of public-private partnerships to enhance access to basic healthcare services and develop more abundant healthcare providers in Brazil. Again, like Brazil, India has also used Public-Private Partnerships (PPPs) to improve infrastructure in rural areas so that quality healthcare services are available.

4. Value-Based Care Models

Scribers have regarded the fee-for-service model of efficiency by providing lost-shipping providers, which has been attributed to overusing care services. On the other hand, value-based models of care payment center on reimbursing healthcare practitioners for positive changes in patient status as well as the quality of services offered at the lowest price possible (Petersen & Fletcher, 2017; Al-Azzam et al., 2023; Al-Shorman et al., 2022; Al-E'wesat et al., 2024).

Attempts to adopt value-based care are beginning to take root in the United States' Medicaid and Medicare programs, where attempts to contain total healthcare costs while promoting quality are taking root. There are great chances that this model will help increase the efficiency of healthcare delivery and decrease the spending on unnecessary measures in UHC systems.

Methods

This review utilized a rigorous approach for synthesizing literature and case clients toward universal healthcare systems. Search categories were restricted to peer-reviewed journals, government documents, and WHO, World Bank, and OECD databases. To some extent, we critically reviewed the approaches adopted by various countries for implementing UHC, especially digital health interventions and new, innovative financing mechanisms.

Data Collection:

- Search databases: PubMed, Google Scholar, WHO Database, World Bank Reports, OECD Health Statistics.
- The inclusion criteria include articles published in the last 10 years, studies on UHC implementation, innovations, and challenges, and reports from major health organizations such as WHO.
- Exclusion Criteria: Articles unrelated to UHC, non-peer-reviewed sources, and reports that did not provide sufficient data or analysis.

Data Synthesis:

- We used a thematic analysis to categorize the challenges and innovations found in the literature.
- Tables, graphs, and charts supported data presentation in qualitative and quantitative formats.

Results and Findings

The findings highlight several key trends and innovations that are shaping the future of UHC:

Digital Health Innovations

- ✓ Telemedicine: India and Kenya have utilized telemedicine to reach out to rural clients and increase healthcare access. This study examines the growth of telehealth during the COVID-19 pandemic, providing insight into its potential future role in enhancing healthcare access.
- ✓ Electronic Health Records (EHRs): By adopting EHRs, countries such as the UK and Canada have attained better outcomes in the coordination of the care the patients receive, less confusion, and enhanced functioning of the health facilities.

- ✓ **Mobile Health Apps:** The use of mHealth applications in the Philippines and South Africa has significantly advanced health and patient monitoring, enhancing the management and strength of the health sector, especially in tackling chronic diseases, including diabetes and hypertension.

Table 1: Global Telemedicine Utilization by Region (2020)

Region	Percentage of Population Using Telemedicine	Key Benefits
North America	45%	Remote consultations, reduced costs
Europe	38%	Improved access to care
Africa	15%	Increased healthcare access in remote areas

2. Financial Models and Policy Innovations

- ✓ **Public-Private Partnerships (PPP):** Countries such as Singapore and Brazil have implemented PPP models that have enhanced the delivery of UHC services by combining public funding with private sector efficiencies.
- ✓ **Global Health Financing:** Innovations in financing mechanisms, such as the Global Fund and GAVI (Global Alliance for Vaccines and Immunization), have demonstrated the power of international collaboration in funding UHC in LMICs.

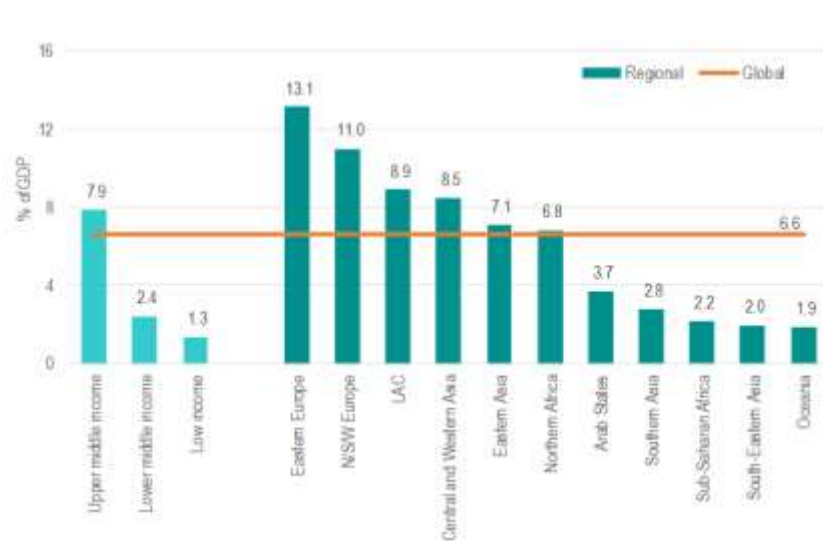


Figure 1: Public-Private Partnership in Healthcare Funding (2018-2022)

A bar chart showing the growing role of PPPs in financing healthcare infrastructure in countries (Chaudhury & Devarajan, 2019)

3. Addressing Healthcare Inequality

- ✓ **Targeted programs:** In countries like Thailand and Cuba, UHC models include specific programs targeting vulnerable populations, such as the elderly, low-income groups, and rural residents.
- ✓ **Community Health Workers (CHWs):** The integration of CHWs into health systems has proven effective in improving health outcomes in remote areas by providing basic healthcare services and education.

The conclusions drawn from the review reveal that attaining UHC is indeed a challenge worldwide. Mobile health and other technologies present a great opportunity for increasing access to necessary care, particularly in regions with limited access. However, infrastructure, a stable internet connection, and data security policies must support these innovations. Moreover, securing funding for UHC systems remains a significant

challenge, particularly in LMICs where resource and economic constraints limit the implementation of these models.

Integration of Digital Technologies:

Although telemedicine and mHealth apps have been widely beneficial in enhancing the availability and accessibility of health care, they have benefited from enhancing the digital literacy of citizens, especially those at the margins. In addition, telemedicine has several policy ***and legal implications that need to be fit and proper, thereby protecting the patient's interest.***

Sustainability and Financing:

The focus is on leveraging UHC reforms to increase health revenue and ensure the sustainability of these models' financing. All these indicate that while Public-Private Partnerships (PPPs) and international financing models can temporarily bridge funding gaps, long-term solutions necessitate significant domestic policy reforms, including progressive taxation and efficient resource allocation.






Health Equity

The above discussion demonstrates that prioritizing health equity is crucial for the progressive implementation of UHC. UHC's Organized systems have to ensure access to essential health care and target factors that escalate health inequalities.

Conclusion

The adoption of various emerging technologies in the context of universal health coverage, such as digital health technologies and new ways of financing universal health coverage for innovations, is likely to solve some of the pressing health issues by expanding people's access to healthcare services, controlling costs, or improving the quality of healthcare. Nevertheless, achieving health for all and establishing sustainable, equitable, and quality health systems necessitates political commitments and increased investment in infrastructure, education and training, health workforce, and pro-equity policies. The following section will discuss how achieving technological, financial, and social solutions to UHC's challenges will require multistakeholder intervention.

Recommendations

-  Expand Access to Digital Health Tools: Expand the use of telemedicine mHealth applications focusing on low-income and deprived clients, especially in LMIC settings.
-  Strengthen Public-Private Partnerships: We should promote public-private partnerships to finance healthcare facilities and improve access to high-quality healthcare services.
-  Focus on Health Equity: UHC models should focus on health equity by focusing on the key vulnerable population structures and health determinants.
-  Develop Sustainable Financing Models: Promote efficient resource mobilization mechanisms toward progressive financing for UHC over the long run.
-  Policy Reforms: Public authorities must develop strategies that require innovative digital care solutions and value-based care delivery models, as those advancements should create added value for different population groups.

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