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Review

The Impact of User Fee Removal on Equity, Efficiency and Health Outcomes in Low-Income Countries

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Abstract: Universal health coverage (UHC) is a core global target, and user fee removal has emerged as a key policy instrument to reduce financial barriers in low-income countries (LICs). This study systematically evaluates the multifaceted impacts of user fee removal policies in LICs across three critical dimensions: health equity, healthcare system efficiency, and population health outcomes. Adopting a structured literature review design, this research integrates peer-reviewed academic publications and grey literature, using snowball sampling to ensure comprehensive evidence selection. Results indicate that user fee removal significantly improved health equity for women and marginalized groups by lowering economic barriers to care, yet pronounced rich-poor and urban-rural disparities persisted. The policy effectively boosted healthcare utilization among targeted populations, including children under five and pregnant women, thereby improving allocative efficiency, but intergroup and regional gaps in service use remained substantial. Vulnerable populations experienced measurable improvements in health outcomes, including reduced mortality and enhanced treatment adherence. However, the policy imposed severe fiscal strain on public health systems, leading to funding shortages, drug stockouts, staff demotivation, and informal payments. In conclusion, user fee removal contributes meaningfully to fairer health resource distribution, higher service uptake, and better health outcomes for priority groups. Nevertheless, persistent socioeconomic inequalities and systemic financial vulnerabilities limit the full realization of policy objectives. For user fee removal to achieve sustainable success in advancing UHC, it must be paired with reliable public financing, targeted pro-poor interventions, and strengthened health system capacity.

Keywords: health policy; health equity; healthcare efficiency; health outcomes; public financing

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1. Introduction

By the 1980s, nearly all African nations had adopted user fees for public healthcare services. This shift followed a 20-year period during which care was provided free of charge but was severely underfunded and of low quality [1]. In low-income and lower-middle-income countries, user fees at the point of care became a common financing mechanism aimed at regulating demand, generating operational revenue, and addressing persistent gaps in government health budgets. However, in regions characterized by extreme poverty, fragile health infrastructure, and global commitments to development goals prioritizing maternal and child survival, infectious disease control, and equitable access, the unaffordability of care emerged as a significant barrier to effective health system performance. This issue was particularly pronounced in the poorest and most remote areas, where the financial burden of healthcare disproportionately affected vulnerable populations, limiting their access to essential services and exacerbating health inequities [2].

A growing body of evidence has highlighted the adverse effects of user fees, showing that they disproportionately deter low-income households, women, and rural populations from seeking timely medical care. In response to these challenges,

governments and global health partners increasingly advocated for the removal of user fees as a direct strategy to eliminate financial barriers and promote equitable access to healthcare [3]. The removal of user fees has been shown to reduce self-medication practices, decrease reliance on traditional healers, increase the use of facility-based care, and shorten delays in accessing essential treatments [4]. These behavioral changes have been linked to significant improvements in population health, including reductions in neonatal, maternal, and under-five mortality rates. By addressing financial barriers, the removal of user fees has the potential to create a more inclusive healthcare system that better serves the needs of marginalized and underserved populations.

Despite the documented benefits of removing user fees, the real-world outcomes of such policies are often complex and vary significantly depending on the context. Critics argue that the abrupt abolition of fees, without adequate compensatory financing mechanisms, can destabilize health systems [5]. This destabilization may lead to reduced service quality and, in some cases, exacerbate inequities through the elite capture of public services. The challenges associated with implementing user fee removal policies underscore the need for careful planning and context-specific strategies. This paper seeks to address these complexities by analyzing multiple country case studies to explore the nuanced impacts of user fee removal across three core dimensions: equity, efficiency, and health outcomes [3]. By examining these dimensions, the study aims to provide a comprehensive understanding of the implications of user fee reforms and to inform the design of sustainable and equitable healthcare policies in resource-limited settings.

- Equity: This dimension examines the impacts of user fee removal on fairness in access to healthcare across gender, socioeconomic, and urban-rural divides. For example, in countries like Burkina Faso and Zambia, the removal of user fees has been associated with increased healthcare utilization among women and rural populations, who often face the greatest barriers to access. However, the extent to which these policies achieve equitable outcomes depends on the availability of complementary resources, such as transportation and healthcare infrastructure, which are critical for ensuring that underserved populations can fully benefit from fee abolition.
- Efficiency: This dimension focuses on changes in healthcare utilization, resource allocation, and service productivity following the removal of user fees. Evidence from countries such as Zambia, Niger, and Kenya, which implemented the 10/20 maternal health policy, suggests that fee removal can lead to increased demand for healthcare services. However, without adequate planning and resource allocation, this surge in demand may strain existing health systems, potentially reducing efficiency and service quality. To address these challenges, it is essential to implement measures that optimize resource distribution and enhance the capacity of healthcare facilities to meet increased demand.
- Health outcomes: This dimension evaluates the effects of user fee removal on mortality, morbidity, treatment adherence, and the sustainability of health systems. Case studies from countries such as Benin, Mali, Vietnam, India, and Zambia demonstrate that the removal of user fees can lead to significant improvements in health outcomes, including reductions in mortality and morbidity rates. However, the long-term sustainability of these improvements depends on the ability of health systems to adapt to increased demand and maintain service quality. Ensuring adequate funding and support for healthcare infrastructure is critical for sustaining the positive impacts of user fee reforms over time.

By synthesizing evidence from multiple countries, this study aims to provide insights into the design of evidence-based policies for user fee reform [6, 7]. The findings highlight the importance of adopting a holistic approach that considers equity, efficiency, and health outcomes to ensure that user fee removal policies are sustainable, equitable, and effective in improving healthcare access and population health in resource-limited settings.

2. Methods

2.1. Study Design

This study adopts a systematic descriptive literature review design to comprehensively analyze the removal of user fees in low-income countries. The approach integrates peer-reviewed research with policy-relevant grey literature to ensure a robust and well-rounded understanding of the topic. A snowball sampling method was employed, beginning with foundational articles and expanding the scope by tracing cited sources. This iterative process enhances the breadth and depth of the review, capturing high-quality studies that may not surface in initial database searches. Additionally, grey literature, such as government reports, program evaluations, and health sector reviews, was incorporated to validate findings and provide supplementary empirical data. This inclusion strengthens the practical applicability of the study's conclusions, ensuring they are grounded in real-world policy contexts [8]. By combining these diverse sources, the methodology ensures a holistic perspective, addressing potential gaps in the evidence base. The integration of grey literature also allows for the identification of nuanced insights that might otherwise be overlooked, thereby enriching the overall analysis and contributing to a more comprehensive understanding of the subject matter.

2.2. Literature Selection and Search Strategy

Two specialized academic databases were selected due to their complementary strengths in addressing the research objectives [4, 9]. These databases were carefully chosen to ensure a comprehensive and balanced exploration of the relevant literature. The selection process prioritized platforms that provide extensive coverage of health systems, policy analysis, service delivery research, and public health economics. This approach ensures that the study captures a wide range of perspectives and insights, thereby enhancing the robustness of the findings.

- BMC Health Service Research was identified as a key resource due to its extensive focus on health systems, policy frameworks, and service delivery research. This database is particularly valuable for its ability to provide diverse insights into the operational and strategic aspects of healthcare systems, making it an essential tool for exploring the multifaceted impacts of user fee removal in low-income settings.
- Public Health was selected for its specialized focus on high-impact research in public health and health economics. This database offers a unique perspective by emphasizing the economic and societal dimensions of healthcare interventions. Its inclusion ensures that the study benefits from a nuanced understanding of the broader implications of policy changes on public health outcomes and equity.

Search protocols were meticulously standardized to ensure methodological rigor and consistency across the selected databases [10]. This standardization process was critical for minimizing bias and enhancing the reliability of the results. By adhering to a uniform set of search criteria, the study ensures that the evidence captured is both relevant and comprehensive, thereby supporting robust and actionable conclusions [11, 12].

- For BMC Health Service Research, the search strategy was designed to focus on publications from 2010 to 2025, ensuring the inclusion of recent and relevant studies. The language was restricted to English to maintain consistency and accessibility. Core keywords such as "user fee removal," "low-income countries," "health outcomes," "health equity," and "healthcare efficiency" were employed to target studies that align closely with the research objectives. This targeted approach ensures that the database yields high-quality and pertinent results.
- For Public Health, the search strategy was adapted to account for the database's lower volume of recent publications. The publication window was extended from 1990 to the present, allowing for the inclusion of valuable historical data that could provide context and depth to the analysis. The language was similarly restricted to English, and the core keywords were consistent with those used for BMC Health Service Research. This approach ensures that the search captures a comprehensive range of studies relevant to the research focus.

Separate searches were conducted for each outcome dimension—equity, efficiency, and health outcomes—to ensure a targeted and systematic evidence capture process. This segmentation allows for a more detailed and nuanced analysis of each dimension, facilitating a deeper understanding of the specific impacts of user fee removal policies [12, 13]. By isolating these dimensions, the study ensures that the findings are both precise and actionable, contributing to a more comprehensive evaluation of the policy's effectiveness.

2.3. Study Selection Results

- The BMC database yielded a total of 78 initial records that were identified for potential inclusion in the study. Following a rigorous title and abstract screening process, 20 articles were deemed relevant for health outcomes, 3 for equity, and 7 for efficiency. After the deduplication process was completed to ensure the uniqueness of the records, a total of 22 publications were finalized for inclusion in the analysis. This meticulous selection process highlights the importance of refining data to ensure that only the most pertinent and high-quality studies are considered for further evaluation.
- From the Public Health database, four articles initially met the specified keyword and date criteria. However, after conducting a comprehensive full-text screening to assess their relevance and methodological rigor, only one publication was ultimately included in the study. This demonstrates the stringent criteria applied to ensure that the final selection of studies aligns closely with the research objectives and maintains a high standard of academic integrity.
- The final analytical sample comprised 23 unique publications. These studies were carefully selected to provide a robust foundation for evaluating the research questions. The inclusion of these publications reflects a deliberate effort to balance comprehensiveness with specificity, ensuring that the analysis is both thorough and focused on the most relevant empirical evidence available.

All the studies included in the final analysis were conducted in low-income country (LIC) settings. These studies specifically evaluated interventions aimed at removing fees and reported empirical outcomes related to three critical dimensions: equity, efficiency, and health status. By focusing on these dimensions, the research provides valuable insights into the broader implications of fee removal interventions, particularly in resource-constrained environments [3, 14]. This targeted approach underscores the significance of addressing systemic barriers to healthcare access and highlights the potential for such interventions to contribute to improved health outcomes and greater equity in healthcare delivery.

3. Results

3.1. Impacts of User Fee Removal on Health Equity

User fee removal has significantly contributed to improving gender equity by empowering women economically and enhancing their ability to make independent decisions regarding healthcare access. This policy shift has allowed women to overcome financial barriers that previously restricted their access to essential health services, particularly in maternal and reproductive care. By eliminating user fees, women have gained greater control over their healthcare choices, reducing their reliance on male family members for financial support [14, 15]. This newfound autonomy has not only improved their access to medical services but also bolstered their sense of dignity and self-reliance, fostering a more equitable healthcare environment [16].

In many low-income countries, women's limited financial agency has historically posed significant challenges to accessing maternal and reproductive healthcare. For example, in Burkina Faso, economic constraints were a major factor contributing to high maternal mortality rates, which stood at 300 per 100,000 live births prior to policy reforms. In response, the government implemented a subsidy in 2006 that covered 80% of fees for emergency obstetric and newborn care, including free delivery, labor, and cesarean

services in specific regions. Surveys conducted after the policy's introduction revealed that women experienced reduced anxiety surrounding pregnancy and childbirth, as well as increased confidence in making independent decisions to seek care at Health and Social Promotion Centres. This policy also lessened their dependence on husbands or male relatives for financial resources, thereby reducing the need to borrow money for medical expenses. These changes not only enhanced women's autonomy but also contributed to a more dignified healthcare experience.

Between 1990 and 2015, maternal mortality in Burkina Faso declined by 75%, and timely medical interventions helped avert 2.7% of neonatal deaths. The removal of user fees also facilitated women's independent access to contraception, even in cases where male family members opposed family planning [17]. While full gender equity has not yet been achieved, the policy has undeniably strengthened women's ability to make autonomous health decisions, marking a significant step forward in promoting health equity. These improvements underscore the transformative potential of targeted healthcare policies in addressing systemic gender disparities and enhancing overall well-being.

Despite the notable progress achieved through user fee removal, disparities in socioeconomic and geographic access to healthcare services have persisted and, in some instances, worsened. These inequities highlight the challenges of ensuring equitable healthcare distribution, particularly in regions with limited resources and infrastructure. Addressing these persistent gaps requires a more nuanced approach to policy implementation, one that prioritizes the needs of the most disadvantaged populations while addressing systemic barriers to access.

In Zambia, the removal of user fees was intended to bridge gaps in healthcare access, but implementation challenges exacerbated existing disparities. For instance, urban areas achieved polio vaccination coverage rates that were 1.5 times higher than those in rural regions. This disparity was largely driven by insufficient drug budgets, which accounted for only 2–3% of total health spending, and high logistical and fuel costs, which consumed 12–14% of budgets and disrupted vaccine supply chains in poorer areas. Additionally, the abolition of fees led wealthier patients, who previously relied on private facilities, to shift to public healthcare services. This phenomenon resulted in the elite capture of higher-level public services, leaving basic services as the only option for poorer populations [18]. Analysis of healthcare utilization patterns confirmed that advanced outpatient care disproportionately benefited wealthier groups, further entrenching existing inequalities.

Further distributional analysis revealed a regressive trend, with the wealthiest 50% of households gaining disproportionately more benefits from the policy. For example, these households experienced a gain of 1.07, while the poorest segments of the population saw minimal improvements. These findings underscore the need for more targeted interventions to ensure that healthcare reforms effectively address the needs of the most disadvantaged groups. Without such measures, policies like user fee removal risk perpetuating or even exacerbating structural inequalities, undermining their potential to promote equitable healthcare access.

3.2. Impacts of User Fee Removal on Healthcare Efficiency

The removal of user fees has consistently demonstrated a positive impact on allocative efficiency by significantly increasing the utilization of healthcare services among underserved and targeted populations. This policy change addresses financial barriers that often prevent access to essential healthcare, particularly for vulnerable groups. By eliminating direct costs, healthcare systems can better align resource allocation with actual demand, ensuring that services reach those who need them most. This improvement in allocative efficiency underscores the importance of reducing economic obstacles to healthcare access, which can lead to broader public health benefits and more equitable service distribution.

In Zambia, the 2006 policy to remove primary care fees in 54 rural districts, which complemented the existing free care for children under five, resulted in a substantial

increase in healthcare utilization. Specifically, quarterly consultations for individuals over five years of age rose by 5,829 visits, marking a 40% increase. Similarly, in Niger, the removal of fees for curative care for children under five in early 2007, combined with free maternal and reproductive health services, led to a remarkable rise in pediatric consultations by 10,427 per quarter, representing a 98% increase. Despite differences in policy design and implementation, both countries achieved significant improvements in the use of targeted healthcare services. These examples highlight the potential of fee removal policies to address suppressed demand and enhance access to essential healthcare services, particularly in underserved regions.

Kenya's 2004 "10/20 policy," which eliminated primary-level fees for maternal health services, provides further evidence of the benefits of such interventions. Between 2003 and 2014, the proportion of pregnant women receiving professional antenatal care increased from 88% to 96%, while facility-based deliveries rose from 40% to 61%. These trends illustrate how removing financial barriers can unlock previously unmet demand for healthcare services, enabling more efficient utilization of available resources. By addressing cost-related obstacles, such policies can significantly improve maternal and child health outcomes, contributing to broader public health goals and enhancing the overall efficiency of healthcare systems.

Despite these successes, structural inefficiencies and inequities persisted across different geographic and socioeconomic groups. While fee removal policies have proven effective in increasing service utilization, they do not address all barriers to healthcare access. For instance, rural populations often face additional challenges, such as limited availability of healthcare facilities, inadequate transportation infrastructure, and shortages of skilled healthcare workers. These structural issues can hinder the equitable distribution of healthcare benefits, leaving certain groups underserved despite the removal of financial barriers. Addressing these persistent inefficiencies requires a more comprehensive approach that goes beyond fee removal to tackle the root causes of healthcare disparities.

In Kenya, rural women consistently experienced lower uptake of maternal health services compared to their urban counterparts. For example, professional antenatal care coverage in rural areas was 6% to 20% lower, and facility delivery rates among the poorest women were three times lower than those of the wealthiest women. These disparities highlight the limitations of fee removal policies in addressing non-financial barriers to healthcare access. Factors such as long distances to healthcare facilities, poor road infrastructure, cultural norms, and low levels of health literacy continue to impede equitable access to services. To achieve more inclusive and efficient healthcare systems, complementary investments are essential. These include increasing the number of skilled healthcare workers, providing better training, expanding outreach programs, and improving infrastructure in underserved areas. Such measures can help bridge the gap in healthcare access and ensure that the benefits of fee removal policies are distributed more equitably across all population groups [19–21].

3.3. Impacts of User Fee Removal on Health Outcomes

The removal of user fees has demonstrated significant and positive impacts on health outcomes, particularly for vulnerable populations. By eliminating cost-related barriers, individuals are more likely to seek timely medical care, which reduces delays that could exacerbate health conditions. This policy change has been especially beneficial for those who previously faced financial obstacles to accessing healthcare, ensuring that essential services are available to all segments of the population regardless of their economic status. The removal of these fees has proven to be a critical step in addressing inequities in healthcare access and improving overall public health outcomes.

Sub-Saharan Africa continues to bear a disproportionate share of the global maternal mortality burden, with a rate of 374.9 per 100,000, which is approximately double the global average. A comparative analysis of countries implementing free cesarean policies, such as Benin (2005) and Mali (2009), against those without such policies, including

Cameroon and Nigeria, revealed substantial improvements in maternal and neonatal health. The introduction of free cesarean services led to a 36% increase in surgical deliveries, enhancing maternal safety and reducing neonatal mortality by 30%. These benefits were most pronounced among rural, low-educated, and economically disadvantaged women, who historically face the highest risks of mortality [17, 22]. This evidence underscores the transformative potential of targeted healthcare policies in reducing disparities and improving outcomes for the most vulnerable groups.

Affordability plays a pivotal role in medication adherence, which is a critical determinant of positive health outcomes. Studies indicate that financial barriers often lead to skipped doses, with 55% of patients in certain contexts reporting non-adherence due to cost. This lack of adherence has been linked to a 41% increase in annual inpatient costs, highlighting the economic and health consequences of unaffordable care. By removing financial obstacles, user fee elimination encourages timely care-seeking behaviors and consistent medication use. For instance, in Vietnam, the provision of free healthcare for children under six years old resulted in a 26% reduction in self-reported sick days and an increase in secondary care utilization. Similarly, India's Vajpayee Arogyashree Scheme, which offers free tertiary care to low-income households in Karnataka, achieved a 16.5% reduction in re-hospitalization rates and improved post-discharge recovery. These examples illustrate how the removal of user fees not only mitigates financial hardship but also fosters better health outcomes by promoting consistent and timely access to care.

Despite its benefits, the sustainability of user fee removal policies has been challenged by inadequate financing in certain contexts [23, 24]. Insufficient funding mechanisms can undermine the long-term viability of such initiatives, reversing the gains achieved in health outcomes. Without robust financial support, healthcare systems may struggle to maintain the quality and availability of services, potentially leading to a resurgence of barriers to care. This highlights the importance of ensuring that user fee removal policies are accompanied by sustainable funding strategies to preserve their positive impact on public health.

In Zambia, the nationwide removal of rural user fees in 2007 faced significant challenges due to inadequate and delayed government funding. The compensation model, based on 2005 revenue projections, proved insufficient to meet the actual financial needs of the healthcare system. Severe delays in fund disbursement—taking five months to reach the Treasury and an additional four to six months to reach rural districts—resulted in substantial operational deficits. Primary care funding experienced a 40% decline, leading to widespread drug shortages and dissatisfaction among healthcare staff. Within six months of implementation, 29% of rural patients aged 5 to 65 were still required to pay informal fees to access care. This combination of lost revenue from user fees and delayed government support left the public health system financially fragile, eroding service quality and ultimately weakening health outcomes [25–27]. These challenges underscore the critical need for timely and adequate funding to ensure the success and sustainability of user fee removal policies.

4. Discussion

The evidence synthesized in this review highlights that user fee removal serves as a potent yet complex policy intervention in low-income countries. Its effects are multifaceted, influencing equity, efficiency, and health outcomes in diverse ways. The success of such policies is heavily dependent on the availability of sustainable financing, the robustness of implementation strategies, and the presence of complementary investments in health systems. Without these critical components, the intended benefits of fee removal may not be fully realized, and unintended consequences could emerge.

In terms of equity, the removal of user fees has demonstrated significant progress in advancing gender equity by empowering women with greater financial independence and reproductive autonomy. For example, in regions such as Burkina Faso, this policy has enabled women to access healthcare services more freely, thereby improving their health outcomes and social standing. However, the policy has been less effective in addressing

disparities between rich and poor populations, as well as urban and rural communities. In Zambia, for instance, the removal of fees inadvertently facilitated elite capture of higher-tier public services, leading to a regressive distribution of benefits. These findings underscore the necessity of implementing targeted measures aimed at supporting economically disadvantaged groups and redistributing resources to underserved geographic areas. Such measures are essential to ensure that fee removal policies contribute to reducing structural inequalities rather than exacerbating them.

From an efficiency perspective, the removal of user fees has consistently led to increased healthcare utilization among underserved populations, thereby enhancing the allocative efficiency of public health systems. Countries such as Zambia, Niger, and Kenya have reported significant surges in facility visits following the abolition of fees, particularly for maternal and pediatric care. However, these efficiency gains are not uniformly distributed. Rural and economically disadvantaged populations often continue to face barriers unrelated to financial costs, such as long distances to healthcare facilities, shortages of healthcare workers, and inadequate infrastructure. These non-financial barriers highlight the need for parallel investments in improving service accessibility and quality. Without addressing these systemic challenges, the efficiency benefits of fee removal will remain uneven and limited in scope.

Regarding health outcomes, targeted fee removal has yielded clear and measurable benefits, including reductions in maternal and neonatal mortality, fewer sick days, improved treatment adherence, and lower rates of hospital readmissions. Evidence from countries such as Benin, Mali, Vietnam, and India demonstrates that vulnerable populations derive the greatest advantages from such policies. However, the absence of reliable and timely government compensation mechanisms linked to utilization can undermine these gains. For example, in Zambia, the lack of adequate funding led to drug shortages, demotivated healthcare staff, and overall declines in service quality [28, 29]. These challenges not only erode health outcomes but also threaten the long-term sustainability of fee removal policies. Ensuring that health systems are adequately compensated and resourced is therefore critical to maintaining the positive impacts of these interventions.

A key insight from this analysis is that while user fee removal is a necessary step toward achieving universal health coverage, it is not sufficient on its own [30–32]. To ensure that such policies are equitable, efficient, and sustainable, they must be integrated into a broader health systems strategy [33, 34]. This strategy should include predictable and sustainable financing mechanisms, targeted support for economically disadvantaged populations, investments in rural healthcare infrastructure, expansion of the health workforce, and robust monitoring systems to prevent issues such as informal payments and elite capture [35–37]. By addressing these interconnected challenges, policymakers can maximize the benefits of fee removal and advance the goal of universal health coverage in a meaningful and sustainable manner [38].

5. Conclusion

This review examined the effects of removing user fees on equity, efficiency, and health outcomes, drawing on empirical evidence from various low-income countries. The findings indicate that when user fee removal policies are carefully designed and implemented, they can significantly enhance gender equity, increase healthcare utilization, and improve health outcomes, particularly for women, children, and economically disadvantaged populations. For instance, experiences from countries such as Burkina Faso, Niger, Benin, Mali, Vietnam, and India highlight the potential of these policies to address systemic inequities and expand access to essential health services. However, contrasting evidence from Zambia and Kenya underscores the risks associated with poorly planned or inadequately funded fee removal initiatives. In such cases, these policies can inadvertently deepen existing inequities, compromise the efficiency of healthcare systems, and destabilize public health financing mechanisms. These contrasting outcomes emphasize the critical importance of context-specific planning,

adequate resource allocation, and robust implementation frameworks to ensure that user fee removal achieves its intended objectives without unintended negative consequences.

Persistent challenges such as socioeconomic disparities, urban-rural divides, and fiscal vulnerabilities continue to hinder the full realization of the potential benefits of user fee removal policies. These barriers disproportionately affect marginalized and underserved populations, limiting their access to equitable and high-quality healthcare services. To address these challenges and achieve the broader goals of equitable, efficient, and sustainable universal health coverage, it is essential for low-income countries to adopt a multifaceted approach. This approach should integrate user fee removal with complementary measures that address systemic weaknesses and promote inclusivity. By doing so, policymakers can create a more resilient and equitable healthcare system capable of meeting the diverse needs of their populations.

1. Reliable, timely, and utilization-adjusted government compensation mechanisms are critical to safeguarding the financial stability of health systems following the removal of user fees. Without such mechanisms, healthcare providers may face significant revenue shortfalls, leading to reduced service quality, staff shortages, and interruptions in the supply of essential medicines and equipment. By ensuring that compensation is both predictable and responsive to actual service utilization patterns, governments can mitigate these risks and maintain the operational efficiency of healthcare facilities. This measure is particularly important in resource-constrained settings, where financial instability can have far-reaching consequences for public health outcomes.
2. Targeted outreach and resource allocation to rural, remote, and marginalized communities are essential for addressing the inequities that persist in healthcare access and utilization. These communities often face significant barriers, including geographic isolation, limited infrastructure, and socioeconomic disadvantages, which exacerbate their vulnerability to poor health outcomes. By prioritizing these populations in the design and implementation of health policies, governments can ensure that the benefits of user fee removal are equitably distributed. This may involve deploying mobile health units, increasing the availability of community health workers, and investing in transportation infrastructure to improve access to healthcare services in underserved areas.
3. Strengthening the health workforce, infrastructure, and supply chains is a fundamental requirement for improving access to and the quality of healthcare services in the wake of user fee removal. A well-trained and adequately staffed health workforce is essential for meeting the increased demand for services that often accompanies the elimination of user fees. Similarly, investments in healthcare infrastructure, such as clinics, hospitals, and diagnostic facilities, are necessary to expand service capacity and reduce overcrowding. Robust supply chains are also critical for ensuring the consistent availability of essential medicines, vaccines, and medical equipment. Together, these measures can enhance the overall resilience and effectiveness of healthcare systems, enabling them to deliver high-quality care to all segments of the population.
4. Strong monitoring and governance systems are indispensable for preventing issues such as elite capture, informal payments, and resource mismanagement, which can undermine the effectiveness of user fee removal policies. Transparent and accountable governance structures are necessary to ensure that resources are allocated efficiently and equitably, reaching the populations most in need. Regular audits, community engagement, and the use of digital technologies for tracking resource flows can enhance oversight and reduce opportunities for corruption. By fostering a culture of accountability and inclusivity, governments can build public trust and ensure the long-term sustainability of health system reforms.

Future research should prioritize the development of long-term sustainability frameworks, cost-effectiveness analyses, and context-specific implementation models to maximize the benefits of user fee removal policies. These research efforts should aim to

identify strategies for integrating fee removal with broader health system reforms, such as expanding health insurance coverage and improving primary care services. Additionally, studies should explore innovative financing mechanisms, such as public-private partnerships and international aid, to address the fiscal challenges associated with fee removal. By generating evidence-based insights, future research can guide policymakers in designing and implementing health policies that are both equitable and sustainable, ultimately contributing to the achievement of universal health coverage.

Institutional Review Board Statement: This study is a literature review based entirely on publicly available academic and grey literature. It does not involve human subjects, protected personal data, or clinical interventions. No formal ethical approval was required. All analysis and writing are original and represent solely the views of the author, not those of the University of Edinburgh or any affiliated research group.

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