



Health Procurement and Universal Health Coverage: A Narrative Review on Equity from Policy to Patients

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ABSTRACT

Universal Health Coverage (UHC) is a global goal that seeks to ensure everyone can access quality healthcare without facing financial strain. A key factor in achieving this is strong health system governance, especially in how drugs, vaccines, and medical technologies are procured. In practice, however, procurement often encounters challenges that limit patient access. For example, in Indonesia, policies favoring a single supplier and prioritizing the lowest price have led to substandard medicines, shortages, and uneven distribution, worsening healthcare inequalities. Emerging procurement strategies offer promising solutions. Pooled procurement can lower costs and improve the availability of essential health products, while e-procurement increases transparency and streamlines administrative processes. Strategic purchasing allows resources to be allocated more effectively, focusing on priority health needs, service quality, and financial protection for the public. Strengthening these procurement systems is crucial for connecting policy intentions with real-world healthcare access and advancing UHC.



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1. INTRODUCTION

Universal Health Coverage (UHC) is a global agenda that emphasizes fulfilling the right of every individual to access quality healthcare services without incurring excessive financial burden. However, an international commitment, achieving UHC depends heavily on effective health system governance. One crucial aspect is the procurement mechanism for drugs, vaccines, and medical devices, which acts as a link between national health policies and the availability of services at the community level.^[1] In this context, the issue of equity becomes a crucial dimension. Unequal access to essential medicines and medical technology often exacerbates health disparities, particularly for vulnerable groups such as low-income communities and residents of remote areas. This has implications for disparities in the quality of services, which contradicts the fundamental principles of UHC.^[2] Many low and middle-income countries face serious challenges in procurement governance. Bureaucratic processes, a lack of transparency, and minimal accountability not only create inefficiencies but also create opportunities for resource leakage.

Studies in Indonesia and Tanzania have shown that weaknesses in procurement mechanisms can lead to distribution delays, uneven stock levels, and higher health costs, thus weakening the health system's leverage towards achieving UHC.^[3] In response, strategic purchasing and pooled procurement have been identified as promising approaches.^[4] Strategic purchasing allows for optimized resource

allocation and improved service quality, while pooled procurement has been shown to be effective in lowering prices, ensuring supply stability, and strengthening equity in distribution. Evidence from systematic reviews confirms that the success of both approaches is strongly influenced by institutional capacity, a supportive regulatory framework, and appropriateness to the local context. Therefore, strengthening equity-based procurement governance is a fundamental step to accelerating the achievement of UHC.^[5]

2. CHALLENGES IN HEALTH PROCUREMENT AND THEIR IMPACT ON EQUITY

Procurement practices frequently encounter significant challenges that affect patient access. In Indonesia, procurement policies that favor a single winner and focus on the lowest price negatively impact drug quality. Substandard drugs, shortages, and limited distribution are the consequences, ultimately exacerbating inequities in healthcare.^[6] Furthermore, in Tanzania, a fragmented procurement system undermines efficiency and exacerbates inequities in access. This fragmentation leads to inconsistent supply chains, limited drug stocks, and disproportionately impacts poor patients. These cases demonstrate how weak procurement governance can hinder the achievement of UHC.^[7]

Controlling the risk of corruption in healthcare procurement is a significant challenge, especially during emergencies. During the COVID-19 pandemic, the massive allocation of public funds for crisis response has increased vulnerability to corruption. This pressure manifests itself in various forms, ranging from inappropriate intervention to bribery of public officials, and is exacerbated by demands for accelerated procurement.^[8] Emergency purchasing mechanisms, which emphasize flexibility, speed, and discretion, often open up opportunities for abuse. Suppliers can exploit this situation to artificially inflate prices, while weak oversight can potentially result in transactions involving substandard or even counterfeit products. Such practices not only undermine the quality assurance of healthcare services but also undermine public trust in government institutions. These cases also highlight the weakness of procurement governance as a barrier to achieving UHC. Weaknesses in transparency, accountability, and cross-agency coordination not only exacerbate inequitable access but also reduce the efficient use of public funds. Ultimately, this contributes to increased healthcare costs for patients, declining service quality, and perpetuating inequities within the healthcare system.

In handling the COVID-19 pandemic, there has been an increase in demand for vaccines, medicines, and personal protective equipment (PPE), while supply cannot meet it. This adds a new challenge, with the discovery of counterfeit and substandard vaccines and medicines. This phenomenon not only threatens patient safety but also hinders the achievement of Universal Health Coverage (UHC), as the UHC principle emphasizes equal access to quality and safe healthcare services. When products in circulation do not meet standards, vulnerable groups are even more at risk of receiving ineffective services, thereby deepening inequities in the healthcare system.^[9]

3. BEST PRACTICES AND INNOVATIONS IN PROCUREMENT

Various innovations have been developed to address procurement weaknesses. Pooled procurement is one approach that has been proven effective in lowering drug and vaccine prices and increasing availability. Systematic studies show that technical capacity, supportive regulations, and supplier incentives strongly influence the success of pooled procurement. [10] Another example of good practice is the National Volume-Based Procurement (NVBP) in China. This policy has enabled lower prices, improved patient adherence to antihypertensive therapy, and reduced the financial burden by nearly 20%. This demonstrates that strategically designed procurement can have a direct impact on patient access.^[11]

Transparency in every procurement process can also minimize corruption. Transparency enables the public to compare prices paid for the same healthcare product at the local, regional, or national level, thereby preventing price gouging, price manipulation, and overpayments. For example, several hospital trusts within the NHS Southern Procurement Partnership in England consolidated and standardized supplier and pricing information for healthcare products typically purchased separately.

Examples include medical gloves and disposable aprons. By grouping and standardizing products, significant savings were demonstrated, with prices ranging from 15–50% lower than the NHS's best prices at the time. Implementing a similar data-sharing strategy across the NHS system could potentially yield savings of up to £500 million. Furthermore, data transparency allows for mapping of normal procurement patterns while identifying anomalies that could indicate overpayments, collusion, or bribery. The consolidation and transparency of procurement data across NHS England not only generates significant cost savings but also supports the goal of Universal Health Coverage (UHC). With budget efficiencies achieved, public funds can be allocated to expand healthcare coverage, while price transparency helps prevent inequities and ensures more equitable access for patients across regions.^[12]

The implementation of the Anti-Corruption, Transparency, and Accountability (ACTA) mechanism has also emerged as a crucial solution for strengthening the healthcare procurement system. ACTA encompasses a range of approaches, from the use of drug quality detection technologies (e.g., Raman spectroscopy to prevent the circulation of substandard drugs), to the implementation of transparency in the procurement process, the imposition of legal sanctions on distributors of counterfeit products, and the establishment of a regulatory framework that is ready to be activated before an emergency. By strengthening ACTA, the risk of misuse of public funds can be minimized, the quality of healthcare products can be more assured, and public trust in healthcare institutions can be increased. This will support the achievement of Universal Health Coverage (UHC), as it ensures that every patient has equitable access to safe, effective, and affordable healthcare services and products.^[9]

4. FROM POLICY TO PATIENTS: LINKING PROCUREMENT TO UHC OUTCOMES

According to the WHO (2022), strategic purchasing is an active, planned, and selective approach to health service procurement, ensuring that resources are allocated efficiently, equitably, and oriented towards the needs of the population. Unlike passive purchasing, which simply finances existing services, strategic purchasing requires careful decisions about what to purchase, from whom, and how to pay for those services. This concept is a crucial instrument in promoting Universal Health Coverage (UHC) by balancing sustainable financing, service quality, and equitable access.^[13]

Thailand, through its implementation of the Universal Coverage Scheme (UCS) managed by the National Health Security Office (NHSO), serves as a clear example of the success of strategic purchasing. The separation of functions between purchasers and providers (purchaser-provider split) enables the NHSO to implement an active purchasing mechanism while simultaneously enforcing accountability for both public and private providers. A comprehensive benefit package has been proven to provide significant financial protection by reducing the risk of health expenditures that could potentially push households into poverty. From a payment mechanism perspective, outpatient services and health promotion are managed through an age-based capitation system, which encourages service utilization, particularly among the poor due to geographic proximity and low costs. Meanwhile, inpatient services are paid using the Diagnosis Related Group (DRG) system within a global budget framework to maintain cost efficiency. High-cost medical interventions are even separated from the general mechanism and financed through a special tariff scheme, thus ensuring service quality. Through its monopsonistic power as the sole purchaser, NHSO is able to lower prices without compromising quality, demonstrating how appropriate strategic purchasing design can strengthen both efficiency and equity in the health system.^[14]

The health purchasing system in Uganda is characterized by significant fragmentation, marked by the coexistence of government financing mechanisms, donor funding, and performance-based schemes that often generate inefficiencies and overlapping incentives. Although the government has defined a minimum benefit package for vulnerable populations and priority diseases, limited domestic funding combined with overlapping donor interventions continues to undermine equitable service distribution. Furthermore, contracting with private providers remains limited, while discrepancies in payment models—where donors emphasize output- and quality-based payments, whereas the government relies predominantly on input-based financing—further widen the gap in effectiveness.

These dynamics underscore the urgent need for harmonizing priorities between government and donors, strengthening financial pooling mechanisms, and enhancing provider-level autonomy and flexibility in budget utilization to ensure that strategic purchasing effectively advances the achievement of universal health coverage in Uganda.^[15]

5. POLICY RECOMMENDATIONS

Strategic purchasing is defined as a health financing approach that actively directs resources to priority services, interventions, and populations by creating appropriate incentives to improve equity and efficiency. This concept holds particular significance in Sub-Saharan Africa, where fiscal constraints and disparities in health outcomes often disproportionately impact per capita health spending. By optimizing the role of strategic purchasing, countries in the region can ensure that funds are used not only more effectively but also provide financial protection and a better response to public health needs.

Despite its significant potential, strategic purchasing implementation in many Sub-Saharan African countries remains passive, with limitations in benefit package design, quality-based contracts, and responsive payment and performance monitoring mechanisms. This weakens the capacity of health systems to achieve Universal Health Coverage (UHC). Therefore, investment in strengthening institutional capacity, implementing a comprehensive evaluation framework, and close collaboration with development partners are needed. These efforts will not only increase transparency and accountability in health budget allocation but also strengthen the role of strategic purchasing as a key instrument in accelerating the achievement of UHC in the region.

One proposed framework to support this transformation is the Strategic Purchasing Africa Resource Center (SPARC) framework. SPARC was developed to help African countries evaluate and strengthen their capacity to implement strategic purchasing. The framework assesses five key components: governance and accountability, benefit package design, provider payment mechanisms, contracting and performance monitoring, and stakeholder engagement. Through this framework, governments can conduct diagnostic assessments to identify structural weaknesses, design improvement strategies, and track progress toward more active and efficient purchasing. SPARC thus serves as a practical tool for linking financing policies to the achievement of more equitable and sustainable UHC in Sub-Saharan Africa.^[16]

6. CONCLUSION

Procurement is a crucial link connecting health policies with patient access to medical services, medicines, vaccines, and health technology. However, challenges such as corruption, system fragmentation, and an excessive tendency to pursue the lowest price often exacerbate inequalities in access to healthcare. If left unaddressed, these weaknesses can undermine the effectiveness of health policies and hinder the achievement of Universal Health Coverage (UHC).

On the other hand, various innovations in procurement governance have shown significant potential to transform health systems. Pooled procurement mechanisms can strengthen the government's bargaining position, lower prices, and increase the availability of essential health products. The use of e-procurement provides greater transparency and accountability while accelerating administrative processes. Meanwhile, a strategic purchasing approach enables a more selective and efficient distribution of resources, focusing on priority health needs, service quality, and public financial protection. With good governance, these three innovations serve not only as technical solutions but also as key drivers for achieving a fair, transparent, and sustainable procurement system. The broader implication is that procurement can transform from a mere administrative function into a strategic instrument that accelerates the inclusive achievement of UHC. Therefore, strengthening institutional

capacity, establishing accountable regulatory mechanisms, and encouraging cross-sector collaboration are urgent agendas for countries committed to achieving equitable health for all their citizens.

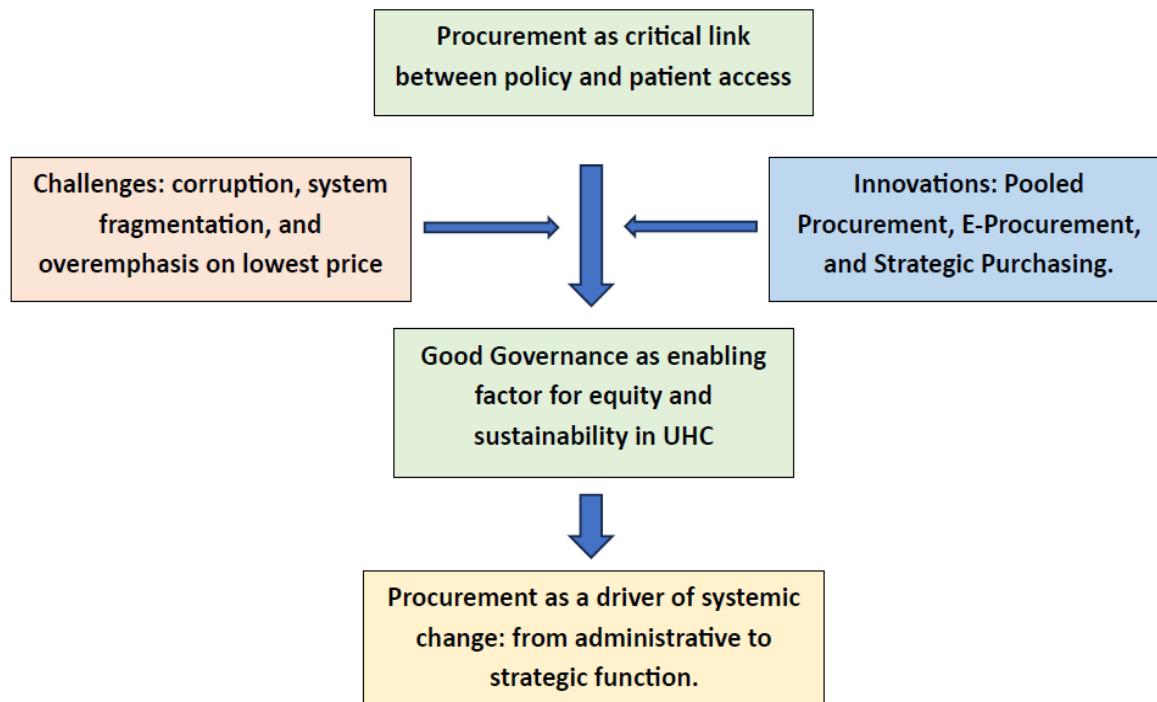


Figure 1. The challenges and innovations of procurement in achieving strategic functions in Universal Health Coverage.

AUTHORS' CONTRIBUTION

Conceptualization of the framework: ASR & AUF. Data analysis, synthesis of the findings, and drafting of the manuscript: ASR. All authors contributed and approved the final version of the manuscript.

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