

Achieving Value for Money in the Procurement of Health Supplies: A Strategic Approach

OGECHI THELMA UZOZIE¹, EKENE CYNTHIA ONUKWULU², IYADUNNI ADEWOLA OLALAYE³, CHRISTIAN ONYINYECHI MAKATA⁴, PATIENCE OKPEKE PAUL⁵,
OLUWAFUNMILAYO JANET ESAN⁶

^{1,2}Independent Researcher, Lagos, Nigeria.

³Bowling Green State University, Ohio, USA.

⁴Independent Researcher, Lagos, Nigeria.

⁵Henry Jackson Foundation Medical Research International Ltd., /GTE, Nigeria.

⁶Amazon, USA.

Abstract- *This paper explores strategic approaches to achieving value for money (VfM) in procuring health supplies, a critical aspect of healthcare management that directly impacts patient outcomes and organizational efficiency. The study highlights the importance of comprehensive procurement planning, effective supplier management, and robust contract oversight in ensuring the optimal use of resources. Key elements such as economy, efficiency, and effectiveness are examined in the context of VfM, emphasizing the need for holistic assessment frameworks. The paper also discusses best practices, including adherence to global standards, adopting innovative procurement methods like e-procurement, and integrating sustainability and ethical considerations. Practical recommendations for healthcare practitioners are provided, focusing on enhancing procurement processes and leveraging technology. The study also identifies future research directions to improve procurement practices and outcomes. By implementing these strategic approaches, healthcare organizations can improve health supplies' quality, availability, and cost-effectiveness, ultimately leading to better patient care and system performance.*

Indexed Terms- *Value for Money (VfM), Health Supplies Procurement, Strategic Procurement, Supplier Management*

I. INTRODUCTION

Procurement in the healthcare sector is a critical component of delivering effective and efficient healthcare services. It involves the acquisition of

medical supplies, equipment, and pharmaceuticals essential for patient care and the operation of health facilities (Gallego-García, Gallego-García, & García-García, 2021; Harland et al., 2021). Effective procurement ensures that health supplies are available, of high quality, and cost-effective, directly impacting patient outcomes and the overall performance of the healthcare system. The significance of procurement in healthcare cannot be overstated, as it determines the accessibility and affordability of healthcare services for populations (Moshtari, Altay, Heikkilä, & Gonçalves, 2021; Parmaksiz, Pisani, Bal, & Kok, 2022). In many low- and middle-income countries, effective procurement practices can mean the difference between life and death, highlighting the importance of optimizing procurement processes to ensure value for money (VfM).

Achieving VfM in the procurement of health supplies is a multifaceted challenge. It encompasses not only the cost of products but also their quality, suitability, and the efficiency of procurement processes. Challenges include managing limited budgets, ensuring transparency and accountability, preventing fraud and corruption, and navigating complex regulatory environments (Sarfo Banahene, Owusu Aninkorah, & Gyimah, 2022). Additionally, supply chain disruptions, such as those seen during the COVID-19 pandemic, can exacerbate these challenges, making it more difficult to ensure the timely delivery of essential supplies. Addressing these challenges requires a strategic approach that balances cost considerations with the need for high-quality and effective health supplies (Israel, 2023; Lysons & Farrington, 2020).

The primary purpose of this research is to explore and elucidate strategies for achieving value for money in procuring health supplies. The study aims to provide a comprehensive understanding of VfM, its components, and the strategic approaches necessary to optimize procurement processes in the healthcare sector. By examining best practices and innovative methods, the research offers actionable recommendations for healthcare practitioners and policymakers to enhance the efficiency and effectiveness of procurement activities.

The key questions addressed in this research include:

- a) What constitutes value for money in the procurement of health supplies?
- b) What are the critical components and criteria for assessing VfM in healthcare procurement?
- c) What strategic approaches can be employed to optimize procurement processes and achieve VfM?
- d) What best practices and innovative methods can be adopted to improve procurement outcomes in the healthcare sector?

This research covers various aspects of achieving value for money in procuring health supplies, focusing on strategic approaches, best practices, and innovative methods. The study examines the definition and components of VfM, criteria and indicators for evaluation, and tools and techniques for measuring VfM. It also explores procurement planning, supplier management, contract management, sustainability, and ethical considerations. Additionally, while the research provides a broad overview of global best practices, it may not fully capture the specific nuances and challenges individual countries or regions face. The study primarily draws on secondary sources and existing literature, which may limit the depth of analysis in certain areas.

II. UNDERSTANDING VALUE FOR MONEY

2.1 Definition and Components

Value for money in the context of health supplies procurement refers to the optimal use of resources to achieve the best possible outcomes in terms of quality,

efficiency, and effectiveness (Gianfredi et al., 2021). It is not merely about obtaining the lowest price but ensuring that the resources spent result in high-quality health supplies that meet the healthcare system's and its patients' needs. VfM involves a holistic approach that considers the total cost of ownership, including acquisition, maintenance, and disposal costs, as well as the benefits derived from the health supplies (Fazekas & Blum, 2021).

The components of VfM can be broken down into three primary elements: economy, efficiency, and effectiveness. Economy pertains to minimizing the cost of resources used for procurement without compromising quality. This involves obtaining health supplies at the best possible price by leveraging bulk purchasing, competitive bidding, and strategic negotiations with suppliers (Skipworth, Delbufalo, & Mena, 2020). Efficiency refers to the relationship between the resources used and the outputs achieved. In health supplies, this means ensuring that procurement processes are streamlined, reducing waste, and improving supply chain management to ensure timely delivery and minimize stockouts. Effectiveness is about how the procured health supplies achieve the desired outcomes. This includes the suitability of the supplies for their intended use, their impact on patient care, and their contribution to the overall goals of the healthcare system (Miller & Lehoux, 2020; Moshtari et al., 2021).

2.2 Framework for Assessing VfM

Assessing value for money (VfM) in health supplies procurement demands a comprehensive framework encompassing diverse criteria and indicators crucial for evaluation. These factors span from cost and quality considerations to supplier performance and impact on patient outcomes. Cost-effectiveness forms a cornerstone, necessitating comparisons across products and suppliers to ascertain the most economical options. Quality evaluation ensures that procured health supplies meet stringent standards, encompassing reliability, durability, and safety, to ensure they effectively serve their intended purposes (Ren, Li, & Zhang, 2020; Zhao, Greenwood, Thurairajah, Liu, & Haigh, 2022).

Timeliness in procurement processes is equally pivotal, ensuring that health supplies are delivered

promptly and in adequate quantities to maintain uninterrupted patient care and operational continuity. Supplier performance evaluation involves ongoing monitoring to gauge reliability, adherence to contractual obligations, and responsiveness to issues, fostering robust supplier relationships while mitigating operational risks. Ultimately, the effectiveness of health supplies is measured by their tangible impacts on patient health and broader healthcare objectives, emphasizing outcomes as a pivotal metric (Spieske, Gebhardt, Kopyto, & Birkel, 2022).

Various tools and techniques enhance the measurement of VfM within healthcare procurement. Cost-benefit analysis (CBA) quantifies economic value relative to costs, aiding informed decision-making by identifying the most advantageous procurement options. Total Cost of Ownership (TCO) analysis provides a holistic view, encompassing all costs from procurement to disposal, ensuring long-term financial viability and efficiency. Performance dashboards offer real-time insights into procurement KPIs, enabling proactive monitoring and continuous improvement initiatives (Ekechukwu & Simpa, 2024; Enahoro, Osunlaja, Maha, Kolawole, & Abdul, 2024; Osunlaja, Enahoro, Maha, Kolawole, & Abdul, 2024).

Benchmarking practices compare procurement practices against industry standards, identifying areas for enhancement and optimization. Supplier scorecards provide structured supplier performance evaluations, facilitating informed decisions and fostering accountability within supplier relationships. Integrating these tools systematically into procurement processes empowers healthcare organizations to optimize resource allocation, enhance supply chain efficiency, and elevate health supplies' overall quality and availability. This strategic approach improves operational outcomes and enhances patient care, aligning procurement practices with broader healthcare goals and ensuring sustainable, effective resource utilization across healthcare systems (Bernd, 2022; Cai et al., 2022).

III. STRATEGIC APPROACHES TO PROCUREMENT

3.1 Procurement Planning and Strategy

The importance of strategic planning in procurement cannot be overstated, especially in the healthcare sector where the timely and efficient acquisition of supplies directly impacts patient outcomes. Strategic procurement planning involves the development of long-term plans that align with the overall objectives of the healthcare organization. It ensures that procurement activities are proactive rather than reactive, allowing for better anticipation of needs, market conditions, and potential disruptions (Oriji & Joel, 2024).

Key elements of a procurement strategy include a thorough needs assessment, market analysis, risk management, and stakeholder engagement. A needs assessment involves understanding the specific requirements of the healthcare facility, including the types of supplies needed, quantities, and quality standards. Market analysis helps identify potential suppliers, understand pricing trends, and assess supplies' availability. Risk management involves identifying potential risks in the procurement process, such as supplier reliability, price volatility, and regulatory changes, and developing strategies to mitigate these risks. Stakeholder engagement ensures that the needs and perspectives of all relevant parties, including clinicians, administrators, and patients, are considered in the procurement process (Gurtu & Johny, 2021; Huma, Ahmed, & Najmi, 2020).

3.2 Supplier Management

Effective supplier management is crucial for achieving value for money in procurement. The selection criteria should include quality, cost, reliability, and compliance with regulatory standards. Healthcare organizations should establish a robust supplier evaluation process that assesses these factors and ensures that only qualified suppliers are selected (Tseng, Ha, Lim, Wu, & Iranmanesh, 2022).

Building and maintaining strong supplier relationships is another critical aspect of supplier management. This involves regular communication, performance monitoring, and collaboration to address issues.

Developing long-term supplier relationships can lead to better pricing, improved quality, and greater reliability. It also enables healthcare organizations to collaborate on innovation and continuous improvement initiatives with suppliers (Benton Jr, Prahinski, & Fan, 2020; O'Brien, 2022). Risk management in supplier selection involves identifying potential risks associated with each supplier and developing strategies to mitigate these risks. This could include conducting thorough due diligence, requiring performance guarantees, and diversifying the supplier base to reduce dependence on any single supplier. Healthcare organizations can ensure a more resilient and reliable supply chain by effectively managing supplier risks (Abdul, Adeghe, Adegoke, Adegoke, & Udedeh, 2024; Ajayi & Udeh, 2024; Nwaimo, Adegbola, & Adegbola, 2024).

3.3 Contract Management

Contract management is vital to strategic procurement, ensuring that agreements with suppliers are effectively executed and managed throughout their lifecycle. Different types of contracts are used in procurement, each with its relevance depending on the specific circumstances. These include fixed-price contracts, cost-reimbursement contracts, and performance-based contracts.

Fixed-price contracts are suitable when the scope of work is well-defined and the cost can be accurately estimated. They provide certainty in terms of budget and cost control. Cost-reimbursement contracts are used when the scope of work is uncertain, and the supplier is reimbursed for allowable costs incurred, plus a fee (Piatak & Pettijohn, 2021). These contracts offer flexibility but require careful monitoring to control costs. Performance-based contracts focus on the outcomes or results of the supplier rather than the specific activities performed. They incentivize suppliers to deliver high-quality results and align their interests with those of the healthcare organization (Shash & Habash, 2020).

Effective contract management's key principles include a clear contract term definition, regular monitoring and evaluation, and proactive management of any issues. Contracts should clearly outline the scope of work, deliverables, timelines, pricing, and performance standards. Regular monitoring and

evaluation ensure that suppliers meet their contractual obligations and that deviations are promptly addressed. Proactive management involves maintaining open communication with suppliers, addressing issues collaboratively, and making adjustments to ensure successful contract execution (Gutierrez, Kothari, Mazuera, & Schoenherr, 2020; Klakegg, Pollack, & Crawford, 2020).

Monitoring and evaluating contract performance is critical to ensure that procurement objectives are met and suppliers deliver value for money (Manu et al., 2021). This involves tracking key performance indicators (KPIs), conducting regular performance reviews, and using feedback to drive continuous improvement. By effectively managing contracts, healthcare organizations can ensure that procurement activities are aligned with strategic objectives and deliver the desired outcomes (Kissi, Adjei-Kumi, Twum-Ampofo, & Debrah, 2020).

IV. BEST PRACTICES IN PROCUREMENT OF HEALTH SUPPLIES

4.1 Global Standards and Guidelines

Adhering to international standards and guidelines is essential for ensuring health supplies' quality, safety, and efficacy. Organizations such as the World Health Organization (WHO), International Organization for Standardization (ISO), and national regulatory bodies provide guidelines that healthcare organizations can follow. These standards cover various aspects of procurement, including product specifications, supplier qualifications, and quality control processes.

An overview of international standards includes WHO's Model List of Essential Medicines, which provides a framework for selecting essential medicines based on public health relevance, efficacy, and cost-effectiveness. ISO standards, such as ISO 13485 for medical devices, ensure that health supplies meet stringent quality and safety requirements. Adapting these global practices to local contexts involves considering the specific needs and constraints of the local healthcare system while ensuring compliance with international standards.

Adapting global practices to local contexts requires a thorough understanding of local healthcare needs, market conditions, and regulatory environments. Healthcare organizations must balance adherence to international standards with practical considerations such as availability of supplies, cost constraints, and local supplier capabilities. This often involves customizing procurement strategies to suit local conditions while aligning with global best practices (Ajayi & Udeh, 2024; Esan, Ajayi, & Olawale, 2024).

4.2 Innovative Procurement Methods

Innovative procurement methods, such as e-procurement and framework agreements, offer significant efficiency, transparency, and cost savings benefits. E-procurement uses digital platforms to manage procurement activities, from supplier selection to contract management. It streamlines processes, reduces paperwork, and enhances transparency by providing real-time visibility into procurement activities.

Framework agreements are pre-arranged agreements with one or more suppliers that set the terms and conditions for future procurements over a specified period. They provide flexibility, allowing healthcare organizations to quickly procure supplies as needed without undergoing a lengthy procurement process each time. Framework agreements can save cost through bulk purchasing and better supplier terms.

Adopting innovative procurement methods includes improved efficiency, reduced costs, and enhanced transparency. E-procurement platforms, for example, can automate routine tasks, freeing up procurement professionals to focus on strategic activities. They also provide data analytics capabilities, enabling better decision-making. However, challenges exist, such as the need for significant upfront investment in technology and the requirement for staff training. Ensuring cybersecurity and data privacy is another critical challenge, given the sensitive nature of healthcare data.

4.3 Sustainability and Ethical Considerations

Incorporating sustainability into procurement decisions is increasingly important as healthcare organizations seek to minimize their environmental

impact. This involves considering the entire lifecycle of health supplies, from production to disposal, and selecting environmentally friendly products. Sustainable procurement practices can include sourcing products with lower carbon footprints, using recyclable or biodegradable materials, and working with suppliers who adhere to environmentally responsible practices.

Addressing ethical concerns in procurement involves ensuring transparency, fairness, and accountability in all procurement activities. This includes avoiding conflicts of interest, preventing fraud and corruption, and promoting equitable treatment of suppliers. Healthcare organizations can implement codes of conduct, establish clear procurement policies, and conduct regular audits to uphold ethical standards.

Promoting transparency in procurement is essential for building trust with stakeholders and ensuring accountability. This involves providing clear and accessible information about procurement processes, decisions, and outcomes. Healthcare organizations can use digital platforms to publish procurement data, conduct open and competitive bidding processes, and engage stakeholders in procurement planning and evaluation.

V. CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Key Findings

This research has highlighted the importance of achieving value for money in procuring health supplies. VfM is essential for ensuring that limited healthcare resources are used efficiently to provide high-quality care. It encompasses three main components: economy, efficiency, and effectiveness, ensuring that procurement decisions maximize benefits while minimizing costs. Strategic procurement planning, effective supplier management, and robust contract management are key to achieving VfM. Best practices in procurement, including adherence to global standards, the adoption of innovative methods, and the incorporation of sustainability and ethical considerations, further enhance procurement outcomes.

5.2 Implications for Healthcare Procurement

The findings have significant implications for healthcare procurement. By focusing on VfM, healthcare organizations can improve the quality and availability of health supplies, leading to better patient outcomes. Strategic approaches to procurement, such as thorough planning, efficient supplier management, and effective contract oversight, are essential for optimizing resource use. Adopting best practices and innovative methods can also lead to greater efficiency, cost savings, and transparency in procurement processes. Sustainability and ethical considerations must also be integrated into procurement strategies to ensure long-term viability and integrity.

5.3 Recommendations for Practitioners

Practitioners aiming to enhance value for money in healthcare procurement can take several practical steps. Beginning with developing comprehensive procurement plans, thorough needs assessments and market analyses are essential to inform strategies that align closely with organizational goals and patient needs. Engaging stakeholders throughout this process ensures that all perspectives are considered, enhancing the relevance and effectiveness of procurement decisions.

Effective supplier management plays a pivotal role in optimizing VfM. Establishing clear criteria for supplier selection and prioritizing qualities such as reliability, quality, and cost-effectiveness forms a solid foundation. Maintaining strong relationships through regular communication and performance monitoring fosters collaboration and ensures that suppliers consistently meet expectations.

Robust contract management is equally critical. Tailoring contract types to specific procurement needs and ensuring that terms, deliverables, and performance standards are clearly defined minimizes ambiguities and reduces risks. Regular supplier performance monitoring facilitates early detection of issues, enabling prompt intervention to maintain compliance and address challenges.

Innovative procurement methods, such as adopting e-procurement platforms and leveraging framework agreements, streamline processes and enhance

transparency. These approaches expedite transactions and offer flexibility in procurement, optimizing cost efficiencies and operational agility. Strategic initiatives further enhance procurement effectiveness. Investing in advanced technologies automates routine tasks, enhances data analytics capabilities, and supports informed decision-making. Capacity building through training programs equips procurement staff with the latest best practices and technological tools, empowering them to navigate complex procurement landscapes adeptly.

Collaborative procurement initiatives enable healthcare organizations to pool resources and leverage collective bargaining power, optimizing procurement outcomes and sharing industry best practices. Continuous improvement mechanisms, including regular audits, performance reviews, and stakeholder feedback loops, drive ongoing refinement of procurement strategies, ensuring they remain aligned with evolving organizational needs and industry standards.

Future research should prioritize investigating the impact of emerging technologies like artificial intelligence and blockchain on procurement efficiency and transparency. Exploring strategies to integrate sustainability considerations into procurement decisions and assessing their long-term impacts on healthcare outcomes are also critical research areas. Additionally, examining the benefits and challenges of increasing supplier diversity in healthcare procurement and comparing global best practices with localized adaptations will provide valuable insights for optimizing procurement strategies across diverse healthcare settings.

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