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Healthcare Financing Options in Urban Uganda: Household Health Financing Strategies, Challenges and Recommendations in Iganga Municipality

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Abstract: Background: The financing of health care is a key element to achieve Universal Health Coverage (UHC), although several households in Uganda are still at risk of financial burden due to the lack of adequate insurance coverage and low public funding. Therefore, this study analyzed the primary financing of health care options utilized by households living in urban areas in Iganga Municipality, the difficulties that have been encountered and household recommendations to improve the access to high-quality care. Methods: A cross-section household survey was conducted in Iganga Municipality between June 2024 and October 2025. All of the households in the municipality were randomly sampled and all data were collected electronically from the household head or the designated representative (greater than or equal to 18 years), including emancipated minors (15 to 18 years) who act as the household head. Descriptive and inferential statistical analyses were performed in STATA, including bivariate tests and multivariable logistic regression for predictors of reporting good perceived quality of care. Results: In total 403 households were included in the analysis. Approximately 58.2 percent of the households included in the sample were 18 to 35 years of age. Funding through public sources was the predominant (74.2 percent) primary financing method, followed by out-of-pocket (OOP) payments (23.8 percent) and private insurance and mixed financing methods were infrequent (1.0 percent each). For public funded households, quality was the most frequently reported challenge (47.5 percent), while for OOP funded households, affordability was the most frequently reported challenge (46.3 percent). Compared with public funding, OOP financing was an independent predictor of reporting good perceived quality of care (AOR equal to 2.52, 95 percent CI: 1.49 to 4.29) and higher household incomes (greater than UGX 1,000,000) also predicted good perceived quality (AOR equal to 2.61, 95 percent CI: 1.08 to 6.33). Conclusion: Households residing in urban areas primarily rely on public services with ongoing concerns regarding quality, while self-payment was related to perceived quality but was also associated with increased affordability challenges. Recommendations from households emphasized cost reductions or subsidies to reduce costs, increasing the strength of the health workforce, improving the facilities, and ensuring consistent availability of medicines and medical supplies.

Keywords: *Healthcare Financing; Out-of-Pocket Payments; Access to Healthcare Services; Uganda; Iganga Municipality; Universal Health Coverage (UHC).*

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I. INTRODUCTION

The purpose of this study was to determine the primary sources of healthcare financing, identify challenges encountered in accessing quality care under each financing option and explore household generated recommendations to strengthen healthcare access for households who utilize healthcare services in Iganga Municipality, Eastern Uganda. The literature review described household healthcare financing strategies and the challenges faced by households when utilizing healthcare services due to the financing options available to them. Healthcare financing is a key function of health systems globally as it provides an economic mechanism to provide and distribute health services to meet the demands of the population (Kutzin, 2013; World Health Organization, 2000). Additionally, effective financing mechanisms are essential to achieving universal coverage (Debie et al., 2022) which is particularly important in low and middle income countries due to high health needs and lack of fiscal capacity (Debie et al., 2022).

Many developing countries have multiple sources of funding for their healthcare services, i.e., public funding, donor funding, prepayment of insurance contributions, and direct payment at the point of service. However, when the direct payment component of the funding source is high, then households will often postpone seeking healthcare services until they are unable to afford to do so, seek alternative but potentially inferior care, or experience "catastrophic" health expenditures leading to poverty (Asante et al., 2020; Ifeagwu et al., 2021).

Additionally, research has shown that the fragmentation of funding and reliance on user fees within many health financing systems leads to inequity, weakens risk pooling and undermines both the effectiveness and the quality of the services delivered (Landon et al., 2022; Rokicki et al., 2021; Tambor et al., 2021). The health financing mix in Uganda is characterized by low levels of public spending and limited insurance coverage. Thus, many households continue to fund their health expenses using direct payments. In addition, regional commitments such as the Abuja Declaration have repeatedly stressed the need for countries to give priority to healthcare in their national budgets; however, the implementation of this commitment has been inconsistent (World Health Organization, 2010). While the removal of user fees in public facilities led to increased utilization of those facilities, financial protection for households remains incomplete and many poor households continue to experience direct costs (Nabyonga Orem et al., 2011).

Studies from eastern Uganda have also demonstrated that households experience financial risks associated with healthcare consumption, e.g., through borrowing money or selling assets to raise funds for healthcare services (Ruhweza et al., 2009). However, perceptions regarding the quality of services provided also impact household decisions regarding healthcare financing. For example, if public facilities are perceived to have stock-outs of drugs and supplies, or if households perceive the public facility staff to be unfriendly, unresponsive, or rude, households may choose to go to a private provider and accept direct payment for services received as the private provider is perceived to offer faster and/or more patient centered care (Mosadeghrad, 2014; Waweru et al., 2020).

Currently, in Uganda, there is ongoing discussion regarding the establishment of a National Health Insurance Scheme as part of the response to the demand for financial protection, as well as concerns related to the level of trust and preparedness of the system (Namuhani et al., 2024; Namyalo et al., 2025).

There is little published evidence of household-level data describing how households in urban areas of medium-sized municipalities finance healthcare, what challenges households encounter under different financing options, and practical recommendations that households may make to strengthen access to healthcare in urban areas of medium-sized municipalities. Therefore, this study sought to identify household strategies for financing healthcare services, perceived service quality and affordability challenges, and household generated recommendations for improving access to healthcare in Iganga Municipality, Eastern Uganda.

II. MATERIALS AND METHODS

- *Study Design and Setting:*

A cross-sectional household survey was conducted in Iganga Municipality, Eastern Uganda, between June 2024 and October 2025.

- *Study Population and Sampling:*

Households were selected using simple random sampling. Eligible respondents were household heads or designated adult representatives aged ≥18 years, including emancipated minors (15–18 years) acting as household heads.

- *Sample Size:*

A minimum sample size of 362 households was calculated using a 95% confidence level and 5% margin of error; 403 households were interviewed.

- *Data Collection:*

Data were collected electronically using an Android tablet-based questionnaire administered by trained data collectors.

- *Measures:*

The primary exposure was the household's primary healthcare financing option (public funding, OOP payment, private insurance, or mixed). Primary outcomes were the main challenge experienced (access, affordability, lack of expertise, or quality) and perceived quality of healthcare services. Perceived quality was dichotomized as good (excellent/very good/good) versus fair/poor for regression analyses.

- *Data Analysis:*

Descriptive statistics summarized household characteristics and financing patterns. Bivariate analyses assessed associations between financing options and

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household characteristics and perceived quality. A multivariable logistic regression model estimated adjusted odds ratios (AORs) for reporting good perceived quality of care, controlling for financing option, income, age, gender, and household size.

➢ *Ethical Considerations:*

The study protocol was approved by the Busitema University Institutional Review Board (IRB), and permission to collect data was obtained from the Iganga Municipal Health Office. Informed consent was obtained from all participants prior to interviews.

III. RESULTS

A. Participant Characteristics and Healthcare Financing Options

A total of 403 households participated. Most respondents were aged 18–35 years (58.2%), and the mean household size was 4.89 (SD 2.49). Public funding was the dominant primary financing option (74.2%), followed by out-of-pocket payment (23.8%). Private insurance and mixed financing were each reported by 1.0% of households (Table 1).

Table 1:Primary Healthcare Financing Options Among Households in Iganga Municipality

Financing Option	n	%
Public funding	299	74.2
Out-of-pocket payment	96	23.8
Private insurance	4	1.0
Mixed (OOP + public)	4	1.0

B. Challenges Encountered Under Each Financing Option

Challenges varied systematically by financing option. Among public-funded households, quality of services was the most commonly cited primary challenge (47.5%), followed by affordability (34.4%). Among households using out-of-pocket payments, affordability was the most common challenge (46.3%) followed by quality (32.6%) (Table 2).

Table 2:Primary Challenges Encountered Under Each Financing Source.

Financing Source	Access n (%)	Affordability n (%)	Lack of Expertise n (%)	Quality n (%)
Public funding	18 (6.0)	103 (34.4)	36 (12.0)	142 (47.5)
Out-of-pocket	7 (7.4)	44 (46.3)	13 (13.7)	31 (32.6)
Private insurance	1 (25.0)	2 (50.0)	1 (25.0)	0 (0.0)
Mixed (OOP + public)	0 (0.0)	3 (75.0)	0 (0.0)	1 (25.0)

C. Perceived Quality of Healthcare Services

In multivariable analysis, out-of-pocket financing remained independently associated with good perceived quality of care compared with public funding (AOR=2.52, 95% CI: 1.49–4.29). Higher household income also predicted good perceived quality (income >UGX 1,000,000: AOR=2.61, 95% CI: 1.08–6.33) (Table 3)

Table 3:Multivariable Logistic Regression Predicting Good Perceived Quality of Healthcare Services.

Predictor	AOR	95% CI	p-value
Out-of-pocket vs Public	2.52	1.49–4.29	<0.001
Other/Mixed vs Public	8.05	0.95–68.50	0.056
510k–1M vs 200k–500k	1.97	1.03–3.77	0.041
>1M vs 200k–500k	2.61	1.08–6.33	0.034
<200k vs 200k–500k	0.71	0.42–1.19	0.193
36–60 vs 18–35	0.74	0.44–1.25	0.262
≥60 vs 18–35	1.82	0.11–30.79	0.679
Male vs Female	1.04	0.63–1.73	0.873
Household size (per 1 person)	0.94	0.84–1.04	0.222

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D. Household Recommendations to Improve Access to Quality Healthcare

Households recommended a combination of financial-protection measures and service-delivery improvements. The most frequent themes were reducing costs/subsidies/free care (32.8%), strengthening the health workforce (21.8%), and improving facilities and access (20.5%) (Table 4).

Table 4:Household Recommendations to Improve Access to Quality Healthcare

Recommendation Theme	n	%
Reduce costs / subsidies / free care	132	32.8
Strengthen health workforce / expertise	88	21.8
Improve facilities & access	83	20.5
Improve medicines & supplies	45	11.2
Increase government funding / budget allocation	22	5.5
Health education & prevention	22	5.5
Improve governance / reduce corruption & accountability	11	2.7

IV. DISCUSSION

Iganga Municipality households are still most likely to report public funding as their primary source of health care financing in the municipality, whereas they are least likely to report using private insurance. The findings of this study reflect more broadly existing research demonstrating that many sub-Saharan African countries will continue to use publically funded tax-based services, along with large amounts of out-of-pocket (OOP) spending, with limited "risk-pooling" via insurance. (Turyamureba et al., 2023; Asante et al., 2020; Ifeagwu et al., 2021)

Many publically financed services were found by the authors to experience common problems with respect to the perceived poor quality of the services offered. Commonly cited examples included stock-out of medication, long waits for service, and a lack of adequate staff. Problems with the reliability of public health care services have been previously identified in other resource-poor public systems, which experience shortages and have fragmented management. These types of issues reduce the reliability of care, lead to dissatisfaction, and impact the likelihood of future utilization. (Malakoane et al., 2020; Debie et al., 2022).

Patient experiences in Uganda indicate that perceived quality of primary level health care is influenced by the following dimensions of care: respectful communication, responsiveness, and the continuity of care provided. (Waweru et al., 2020). In contrast, households that relied on OOP expenditures generally cited the same type of problem related to the affordability of the payment for the services they received. Cited examples of this type of problem include having difficulty paying for emergency services due to a lack of liquidity, and the potential of having to borrow or sell assets to fund the cost of medical treatment. These findings are consistent with previous research conducted in Eastern Uganda, indicating that household exposure to financial risk when seeking health care is exacerbated by the presence of weak financing mechanisms. (Ruhweza et al., 2009).

Even though user fees have been removed from public facilities, OOP expenditures represent a major factor driving inequity in the ability of individuals to access needed health care. Additionally, there is evidence suggesting that even after the removal of user fees from public facilities, those who are able to afford it are able to "choose" to use private facilities for health care, creating a "dual system." (Nabyonga-Orem et al., 2011).

OOP expenditure was positively associated with perceptions of quality of care in this study after controlling for income and sociodemographic characteristics. One possible reason for this association is that households that utilize OOP may seek health care from private providers, where the interpersonal aspects of care, and the timeliness of care, may be seen as being superior to what is available in the public sector, even if the costs of accessing these services are greater than the costs of using public sector services. This represents a general theme in the literature, which links service quality to organization-related factors (such as staffing levels, supplies, leadership, and patient centeredness) (Mosadeghrad, 2014). It is also consistent with national-level research regarding how financing arrangements affect the choices made by individuals regarding the location of care. (Turyamureba et al., 2023; Adongo et al., 2025).

The majority of households recommended a variety of solutions to improve their experiences with accessing health care. These solutions included reducing the cost of care, improving the quality of care at public facilities, ensuring that medications and other supplies were consistently available, and providing insurance-like mechanisms for prepaying for health care services. These suggestions are consistent with the types of UHC-oriented reform efforts that emphasize pooled financing, strategic purchasing, and continued public investment to eliminate the reliance on direct payments for needed health care. (Tambor et al., 2021; Kutzin, 2013). There is growing interest in developing a National Health Insurance Scheme in Uganda, however, concerns regarding trust and implementation readiness are also becoming increasingly evident, and should be addressed through transparent governance and a phased rollout plan. (Namuhani et al., 2024; Namyalo et al., 2025).

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Overall, the findings of this study support the idea that enhancing the quality and reliability of public sector services has the potential to decrease the perceived need for OOP spending, while well-designed prepayment options could provide additional financial protection. Future studies should investigate the longitudinal effects of changes in financing strategies and assess the effectiveness of policy initiatives that combine improvements to quality with expansions to in-surance coverage.

V. CONCLUSION AND RECOMMENDATIONS

Urban households in Iganga Municipality relied predominantly on public funding for healthcare, while OOP financing was associated with higher perceived quality but substantial affordability challenges. These findings highlight persistent weaknesses in risk pooling and service quality in public facilities.

Policy reforms should prioritize expanding prepayment and risk-sharing mechanisms such as national health insurance, strengthening quality of public healthcare services through workforce and facility improvements, ensuring reliable medicines and supplies, and implementing targeted subsidies for vulnerable households.

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