

**Research Article****ASSESSING HEALTHCARE AFFORDABILITY UNDER THE FREE HEALTHCARE PROGRAMME IN SIERRA LEONE*****Daniel Rince George**

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Abstract

Sierra Leone's Free Healthcare Programme, primarily implemented through the Free Healthcare Initiative, aims to eliminate user fees for priority groups and improve access to essential services. However, high out-of-pocket costs persist, indicating ongoing affordability and financial protection challenges. This study integrates data from government financing records and household surveys to evaluate healthcare affordability under the programme and recommend policy reforms, in line with WHO guidance and the updated SDG 3.8.2 standard (United Nations Statistics Division, 2025; WHO, 2025a). Data sources include the National Health Accounts 2019-2020 (MoH, 2023), the Digital Health Roadmap 2024-2026 (MoH, 2024), the UN Common Country Analysis 2023 (UN Sierra Leone, 2024), the National Health Compact 2025-2030 (Government of Sierra Leone, 2025), Auditor-General reports (Audit Service Sierra Leone, 2024, 2025), and recent studies on catastrophic spending in Freetown's informal settlements (Fullah *et al.*, 2025) and public health system redistribution (Gabani *et al.*, 2024). NHA data indicate that out-of-pocket payments accounted for 52.9% of current health spending in 2019 and 52.3% in 2020, with donors contributing 34.0% and 36.2%, and the government 13.5% and 16.8% (MoH, 2023). Total health spending increased from SLL 3,420.88 billion in 2019 to SLL 4,184.50 billion in 2020. The Freetown household study found that 57% of households seeking care outside their communities incurred catastrophic costs, with the poorest group most affected (89%) compared to the wealthier group (12%) (Fullah *et al.*, 2025). These challenges are linked to shortages of medicines and diagnostics, additional costs such as transport, fragmented funding, and inadequate oversight of unofficial charges.

Keywords: Goldbach Conjecture, Hardy-Littlewood Prime Sum Conjecture, Combinatorial approximation method, Linear Diophantine equation, Number of solutions, Set of solutions, Subset of integer, Prime number.

INTRODUCTION

Affordable healthcare is essential to universal health coverage, ensuring individuals can access necessary care without financial hardship. Financial protection is globally measured by SDG indicator 3.8.2, which tracks catastrophic health spending (WHO, 2023). The updated SDG guidelines (December 2025) define catastrophic spending as out-of-pocket health costs exceeding 40% of a household's discretionary budget, calculated after basic needs are met (United Nations Statistics Division, 2025). WHO adopts this definition and recommends disaggregating data by residence and income level (WHO, 2025a). This is particularly relevant for Sierra Leone, where many families have limited discretionary income, making even small payments for medicines, tests, or transport burdensome. The Free Healthcare Programme in Sierra Leone is intended to eliminate point-of-care fees for priority groups and essential services. However, National Health Accounts indicate that households continue to pay over half of current health costs directly (MoH, 2023). This often results in delayed care and catastrophic expenses, particularly for poorer families (WHO, 2023; World Bank, 2026). The issue extends beyond official fees: when public facilities lack medicines or tests, patients must purchase them privately, effectively converting free care into paid services (WHO, 2024). Additional costs such as transport and lost time further exacerbate the burden. Recent studies from Freetown's informal settlements underscore these challenges. An April–May 2023 survey found that households incurred higher costs

and were more likely to face catastrophic expenses when seeking care outside their communities, with the poorest families most affected (Fullah *et al.*, 2025). Sierra Leone is pursuing reforms through the National Health Compact 2025–2030, which aims to reduce out-of-pocket payments and fragmented funding using a 'One Plan, One Budget, One Report' approach (Government of Sierra Leone, 2025). WHO AFRO also reports strong support for a bill to integrate the Free Healthcare Initiative and the Social Health Insurance Scheme into a unified system (WHO AFRO, 2025). This article examines healthcare affordability under the Free Healthcare Programme by linking funding patterns, household challenges, and key cost drivers to policy solutions.

Statement of the Problem

Despite fee-exemption policy commitments, Sierra Leone's health financing structure remains dominated by household OOP spending. The National Health Accounts 2019–2020 show OOP at 52.9% of CHE in 2019 and 52.3% in 2020 (MoH, 2023). Such high OOP reliance is widely recognized as a structural driver of catastrophic expenditure and impoverishment because risk pooling is limited, and costs are concentrated on those who fall ill (WHO, 2023). The affordability gap is intensified by medicine and diagnostic stock-outs, non-medical costs (especially transport and referral), fragmented pooling and purchasing, and weak accountability for unofficial charges. Household evidence from Freetown's informal settlements demonstrates severe vulnerability: 57% of households experienced catastrophic expenditure for outside-community episodes, and catastrophic incidence was 89% among the poorest quintile compared to 12% among the wealthier quintile (Fullah *et al.*, 2025). The

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problem, therefore, is that the Free Healthcare Programme's protective intent is undermined by persistent cost drivers and financing weaknesses, producing continued financial hardship and inequitable protection across socioeconomic groups.

Aim and Objectives

The main aim is to assess healthcare affordability under Sierra Leone's Free Healthcare Programme and to identify strategic policy responses that strengthen financial protection in accordance with updated SDG 3.8.2 and WHO guidance.

Specific objectives

Specific objectives are to:

1. Describe national financing patterns using official NHA indicators, focusing on OOP as a share of CHE;
2. synthesize recent household evidence on catastrophic spending and distributional gradients;
3. Identify structural cost drivers that sustain household payments under a nominally free programme;
4. Propose strategic reforms consistent with national policy commitments and global financial protection criteria.

Importance of the Study

This study offers both practical and academic value. For decision makers, it connects national financing data with household-level challenges and identifies necessary reforms to ensure free-care policies provide effective financial protection. The analysis applies the updated SDG 3.8.2 approach, supporting reliable monitoring and cross-country comparisons (United Nations Statistics Division, 2025; WHO, 2025a). For health managers, it recommends actions such as guaranteeing the availability of medicines and tests, securing consistent facility funding, and addressing referral costs to reduce hidden payments and strengthen community confidence (MoH, 2024; WHO, 2024). For development partners, it outlines how external funding can be better coordinated to reduce fragmentation, in line with the National Health Compact's 'One Plan, One Budget, One Report' model (Government of Sierra Leone, 2025). For researchers, the study integrates recent household evidence within the context of ongoing reforms, including the SLAUHC proposals (Fullah *et al.*, 2025; WHO AFRO, 2025).

Literature Review

Financial protection is a core UHC pillar, and high OOP financing is associated with higher catastrophic spending and inequitable access (WHO, 2023; World Bank, 2026). Updated SDG 3.8.2 measurement emphasizes OOP relative to household discretionary budget, improving sensitivity to poverty impacts (United Nations Statistics Division, 2025; P4H, 2025). In many low-income settings, fee exemptions can raise utilization yet may not eliminate hidden payments when medicines and diagnostics are unavailable, when transport costs are high, or when provider payment systems create incentives for informal charging (WHO, 2024; WHO, 2025b). In Sierra Leone, NHA 2019–2020 provides official evidence that OOP remains above 50% of CHE (MoH, 2023). Equity analysis shows the public health system can redistribute modestly and that primary healthcare services are markedly pro-poor, but resource allocation could be more equitable, implying the importance of PHC investments for both equity

and affordability (Gabani *et al.*, 2024). Household evidence from urban informal settlements shows very high catastrophic spending for outside-community care and strong wealth gradients, highlighting the role of access barriers and private purchases in generating hardship (Fullah *et al.*, 2025). National policy documents emphasize reducing fragmentation and strengthening UHC governance, including through the National Health Compact and proposed SLAUHC arrangements integrating key financing mechanisms (Government of Sierra Leone, 2025; WHO AFRO, 2025).

METHODS

Design

A mixed-evidence affordability assessment was conducted using secondary analysis and structured synthesis. The design is analytic and triangulates official financing accounts, policy documents, audit evidence, and peer-reviewed household studies.

Population

The administrative analysis covers national health financing flows recorded in NHA 2019–2020. The household synthesis focuses on households represented in peer-reviewed evidence on catastrophic expenditure and in national datasets used for equity analysis.

Sample size and determination: No new primary data were collected. The NHA is a national accounting exercise based on expenditure data from government, donors, private providers, and households (MoHS, 2023). For household evidence, we synthesized Fullah *et al.* (2025), which analysed N=2,575 participants reporting healthcare utilisation in Freetown informal settlements; this sample size supported the estimation of costs and catastrophic expenditure for within- and outside-community episodes, and stratification by wealth quintile. We also synthesized Gabani *et al.* (2024), which used secondary national datasets for distributional analysis.

Data sources

Primary administrative sources were the MoH National Health Accounts 2019–2020 (MoH, 2023) and the MoH Digital Health Roadmap 2024–2026 (MoH, 2024). Contextual policy sources included the UN Common Country Analysis 2023 (published 2024) and the National Health Compact 2025–2030 (UN Sierra Leone, 2024; Government of Sierra Leone, 2025). Accountability context drew on the Auditor-General's Annual Reports for FY2023 and FY2024 (Audit Service Sierra Leone, 2024, 2025). Empirical evidence included Fullah *et al.* (2025) and Gabani *et al.* (2024). Global methodological alignment used UNSD SDG 3.8.2 metadata and WHO financial protection guidance (United Nations Statistics Division, 2025; WHO, 2025a).

Analysis: We produced descriptive indicators and visualizations for NHA financing shares and expenditure levels. We synthesized household evidence narratively (without statistical pooling) due to heterogeneous denominators. We classified cost drivers into medicines/diagnostics availability, non-medical costs, pooling/purchasing fragmentation, and accountability constraints, and mapped them to policy levers consistent with national reforms and WHO guidance (WHO, 2025b).

RESULTS

Table 1. Core health financing indicators from recent official sources

Source	Year/period	THE (billion SLL)	CHE (billion SLL)	OOP share of CHE (%)	Gov share of CHE (%)
MoHS National Health Accounts 2019–2020 (published 2023)	2019	3420.88	3353.5	52.9	13.5
MoHS National Health Accounts 2019–2020 (published 2023)	2020	4184.5	3724.58	52.3	16.8
MoH Digital Health Roadmap 2024–2026 (snapshot)	Roadmap snapshot	—	—	52.3	14.6

Discussion (Table 1, ~210 words): Table 1 summarizes official indicators that frame affordability pressures. Total health expenditure rose from SLL 3,420.88 billion (2019) to SLL 4,184.50 billion (2020), while current health expenditure increased from SLL 3,353.50 billion to SLL 3,724.58 billion (MoH, 2023). In principle, rising expenditure could reduce household costs by improving service readiness and commodity availability. However, affordability depends on whether spending reaches the inputs that households otherwise purchase privately. In these accounts, OOP remained the dominant financing source—52.9% of CHE in 2019 and 52.3% in 2020—indicating that households still finance the majority of routine care (MoH, 2023). The Digital Health Roadmap provides a comparable snapshot (OOP: 52.3%; government: 14.6%), suggesting the pattern is stable and system-recognized (MoH, 2024).

This persistence is a financial protection concern because high OOP systems are structurally prone to catastrophic expenditure, particularly among poor households with minimal discretionary resources (WHO, 2023; WHO, 2025a). Under the revised SDG 3.8.2 method, catastrophic spending is assessed relative to discretionary budget net of basic needs, which is especially stringent in low-income contexts (United Nations Statistics Division, 2025). Therefore, even small payments for medicines or transport can be catastrophic. The table implies that policy reforms must target the structural drivers of household payments medicines, diagnostics, transport, and unofficial fees rather than assuming that fee exemptions alone will deliver affordability.

Table 2. Current health expenditure financing mix (shares) from NHA 2019–2020

Financing source	2019 share (%)	2020 share (%)
Government	13.5	16.8
Donors/Rest of world	34.0	36.2
Out-of-pocket (households)	52.9	52.3

Discussion (Table 2, ~210 words): Table 2 shows that households financed roughly half of current health expenditure in both 2019 and 2020, while donors/rest of world financed about one-third and the government less than one-fifth (MoH, 2023). This composition signals limited prepayment and pooling, which the WHO identifies as the core mechanism for financial protection (WHO, 2025a). It also signals sustainability risk: external funding can be volatile, and fragmented streams can damage coherent purchasing and supply assurance. The National Health Compact explicitly targets reduced fragmentation through a “One Plan, One Budget, One Report” approach and proposes measures to reduce OOP and strengthen pooled financing (Government of Sierra Leone, 2025).

High donor shares can support service delivery, but if funding is not pooled or if procurement and supply chain systems remain weak, households may still pay privately for essential inputs. In practice, patients frequently incur costs for medicines, diagnostics, and supplies when public facilities experience stock-outs, making free-care entitlements incomplete. Such hidden payments are consistent with global evidence that the affordability effect of fee removal depends strongly on commodity availability and provider payment incentives (WHO, 2024; WHO, 2025b). Table 2, therefore supports reforms that consolidate financing streams and strengthen strategic purchasing so that public and partner funds systematically finance the inputs that otherwise generate OOP payments. It is consistent with WHO AFRO’s reporting on proposed SLAUHC arrangements to integrate and manage key financing mechanisms to reduce fragmentation and improve efficiency (WHO AFRO, 2025).

Financing mix of current health expenditure (CHE), NHA 2019–2020

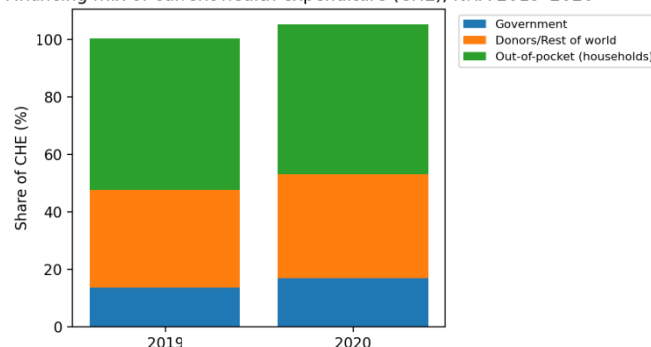


Figure 1. Financing mix of current health expenditure (CHE), NHA 2019–2020

Discussion

(Figure 1, ~210 words). Figure 1 illustrates the persistence of household payments in Sierra Leone’s financing architecture. The composition changes only marginally between years: OOP remains the largest component, donors remain substantial, and government remains comparatively small (MoH, 2023). This matters because financial protection is achieved when care is financed primarily through prepayment and pooling mechanisms rather than direct payments at the time of illness (WHO, 2025a). When over half of CHE is financed OOP, the system concentrates costs on those who are sick, increasing the probability of catastrophic spending and delayed care. The revised SDG 3.8.2 definition heightens this concern, because catastrophic spending is now measured relative to discretionary resources net of the social poverty line, which can be extremely limited for poor households (United Nations Statistics Division, 2025). In these situations, even modest OOP can exceed 40% of the discretionary budget.

Figure 1 also stresses the importance of integrated financing reforms. The National Health Compact's targets to reduce OOP and rationalize financing arrangements imply that progress must be visible in this financing mix over time (Government of Sierra Leone, 2025). Without noticeable changes toward increased government pooling and improved strategic purchasing of donor funds, households will continue to shoulder costs through private purchases of medicines, diagnostics, and transport. Therefore, Figure 1 provides a baseline visual benchmark against which Sierra Leone can evaluate whether future reforms including SLAUHC governance proposals produce real reductions in household payments and improved affordability (WHO AFRO, 2025).

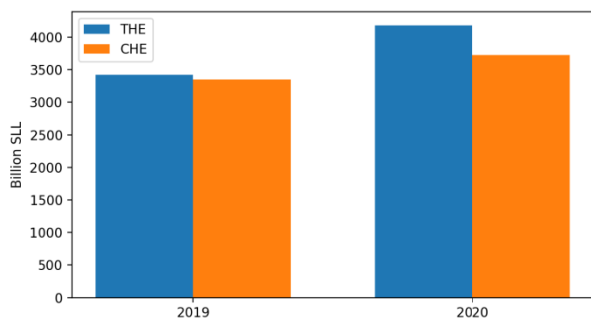


Figure 2. Total and current health expenditure levels, NHA 2019–2020

Discussion

(Figure 2, ~210 words). Figure 2 shows that both total and current health expenditure increased between 2019 and 2020 (MoH, 2023). Rising expenditure can create an opportunity to strengthen financial protection if funds are used to finance the components of care that households otherwise purchase privately. However, the relationship between spending levels and affordability is mediated by allocation and execution. In a free-care setting, households commonly pay when medicines, diagnostics, and consumables are unavailable at facilities, or when facility operating funds are insufficient to deliver entitlements. Therefore, to translate higher spending into lower hardship, expenditure increases must be directed toward supply assurance, provider payment reforms, and referral systems.

Figure 2 also illustrates the difference between total expenditure and current expenditure. Investments in capital and system strengthening may raise total expenditure without immediately lowering household costs if recurrent financing for commodities and facility operations remains inadequate. This is consistent with WHO guidance that effective financial protection requires sustained recurrent financing and planned purchasing, rather than infrastructure or one-off inputs (WHO, 2025b). The National Health Compact's emphasis on coherent planning and budgeting creates a framework to align resource growth with affordability outcomes (Government of Sierra Leone, 2025). Yet the persistence of high OOP shares in the same period suggests that spending growth did not sufficiently reduce the private cost burden (MoH, 2023). Consequently, Figure 2 supports a policy conclusion that the next phase of reform should emphasize spending composition and execution quality, with explicit financial protection targets and monitoring under the revised SDG approach (WHO, 2025a; United Nations Statistics Division, 2025).

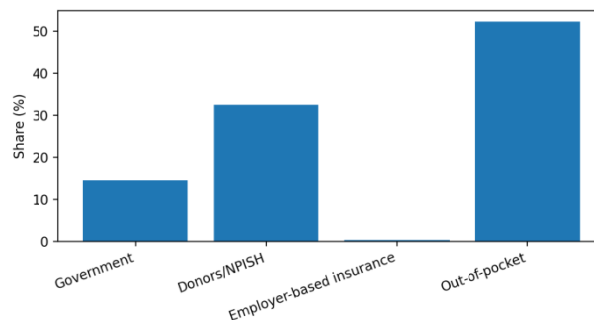


Figure 3. Financing shares reported in the Digital Health Roadmap 2024–2026

Discussion

(Figure 3, ~210 words). Figure 3 reproduces financing shares reported in the Digital Health Roadmap 2024–2026 and demonstrates that the Roadmap's diagnosis closely matches the NHA picture: OOP remains the largest financing source, and formal insurance is minimal (MoH, 2024). This matters for affordability because digital transformation can reduce household payments only if digital systems are applied to the mechanisms that generate OOP particularly commodity stock-outs, weak referral coordination, fragmented purchasing, and limited accountability for unofficial charges.

The Roadmap emphasizes stakeholder coordination and the operationalization of a digital strategy to deliver UHC outcomes (MoH, 2024). In practical terms, strengthening logistics management information systems can improve the availability of medicine, reduce leakage, and enable rapid redistribution throughout facilities. Interoperable reporting can also support more accurate monitoring of service readiness and allow the Ministry to detect whether free-care entitlements are being delivered. Furthermore, digital tools may strengthen payment and claims processes for pooled schemes, reducing delays that sometimes trigger informal charging. From a measurement standpoint, WHO's refined financial protection resources emphasize disaggregated reporting by residence and quintile (WHO, 2025a). Digital systems can facilitate these disaggregation, enabling Sierra Leone to track whether affordability reforms benefit poor households. Therefore, Figure 3 supports a strategic recommendation: tie the digital health agenda explicitly to financial protection targets by using digital systems to improve commodity availability, strengthen facility financing transparency, and monitor patient cost burdens, rather than treating digitalization as a parallel modernization track disconnected from affordability outcomes.

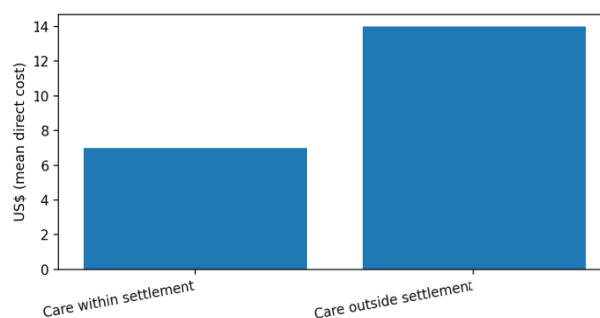


Figure 4. Mean direct costs within vs outside settlements (Freetown survey 2023; published 2025)

Discussion

(Figure 4, ~210 words). Figure 4 illustrates a pathway mechanism documented in Freetown informal settlements: average direct costs roughly doubled when care was sought outside communities compared with within communities (US\$14 vs US\$7) (Fullah *et al.*, 2025). This provides a concrete explanation for how free-care policies may fail to protect households: the cost burden arises not only from formal fees but from where and how care is obtained. When community-level services are inadequate due to perceived quality, lack of medicines, limited diagnostics, or shortages of skilled staff households may seek care farther away, incurring transport costs and often paying for private inputs. This can be especially significant for maternal and child health emergencies that require referral. WHO guidance highlights that non-medical costs and supply chain failures are major sources of financial hardship in low-income contexts, and that improved service readiness and referral systems can reduce the need for costly care-seeking pathways (WHO, 2024; WHO, 2025b). Under the revised SDG 3.8.2 definition, the same cost amounts can be catastrophic for the poorest households because their discretionary budgets are limited after meeting basic needs (United Nations Statistics Division, 2025; WHO, 2025a). Therefore, reducing the cost penalty of outside-care episodes should be an explicit affordability strategy. Figure 4 supports two complementary policy levers: strengthening the readiness of community and primary care services so households can access quality care locally, and mitigating the costs of necessary referrals through transport support, ambulance strengthening, and clear referral protocols. Both levers correspond to national reform commitments to reduce fragmentation and improve integrated service delivery under UHC (Government of Sierra Leone, 2025).

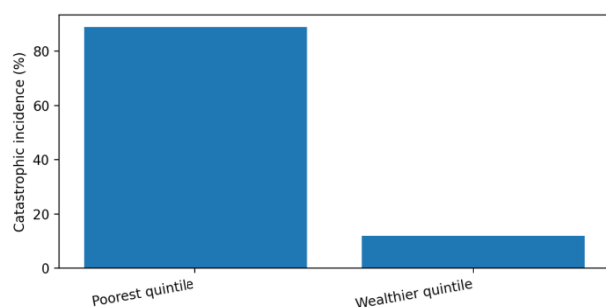


Figure 5. Catastrophic spending by wealth group for outside-care episodes (Freetown survey 2023; published 2025)

Discussion

(Figure 5, ~210 words). Figure 5 shows the extreme inequality in catastrophic spending for outside-community care episodes: catastrophic incidence reached about 89% among the poorest quintile and about 12% among the wealthier quintile (Fullah *et al.*, 2025).

This gradient demonstrates that affordability remains fundamentally distributional. Even if the average cost of care is the same, the poorest households face far greater hardship because their discretionary budget is much smaller. Under the revised SDG 3.8.2 approach, which subtracts the societal poverty line from total resources to define discretionary budget, the hardship of the poorest is even more visible: households near or below the poverty line may have very small or negative discretionary budgets, so any OOP can qualify as catastrophic (United Nations Statistics Division, 2025; WHO, 2025a). The result has clear implications for targeting and design. If policy responses treat affordability as a uniform problem, reforms may miss those most at risk. Instead, financial protection interventions should prioritize the poorest and those with high exposure to referral costs. Targeted transport support, community outreach, and strengthened primary care readiness can reduce the need for outside-care episodes that trigger catastrophic spending. Moreover, the result aligns with equity analysis suggesting that primary healthcare can be pro-poor and can reduce inequality, implying that PHC financing is also an affordability intervention (Gabani *et al.*, 2024). Finally, Figure 5 supports the need for routine monitoring of financial protection disaggregated by quintile and residence, as recommended by WHO, to ensure that reforms deliver measurable improvements for poor households rather than only improving system averages (WHO, 2025a).

Discussion (Table 3, ~210 words). Table 3 consolidates household-level and equity evidence, deepening the interpretation beyond financing shares. Fullah *et al.* (2025) provide micro-level evidence that catastrophic expenditure can be widespread in poor urban communities when care is sought outside local boundaries, highlighting the roles of access barriers, transport, and reliance on private inputs. This evidence helps explain why OOP can remain high even under a nominally free-care policy: households may pay for medicines, diagnostics, and non-medical costs not covered or not effectively delivered by the programme.

Gabani *et al.* (2024) complement this by examining the redistributive effect of Sierra Leone's public health system. They find that public healthcare can modestly reduce income inequality, with PHC services being markedly pro-poor, yet the system could be more equitable when needs are considered. This points to PHC investment as a dual strategy for equity and affordability. When PHC services are available and trusted, households are less likely to incur high costs seeking care at higher-level facilities or in private markets. Together, these studies support a coherent conclusion: Sierra Leone's affordability challenge is driven by structural factors along the care pathway rather than by formal fees alone. Therefore, reforms that ensure the availability of medicines and diagnostics, reduce referral and transport costs, and strengthen purchasing and accountability are likely to yield the largest financial protection gains.

Table 3. Recent household affordability evidence (2018–2026) used in this synthesis

Study	Setting / period	Sample / data	Indicator	Key results
Fullah <i>et al.</i> (2025)	Freetown informal settlements; survey Apr–May 2023	N=2,575 reporting healthcare utilisation	Catastrophic expenditure (payer's household budget)	Outside-care catastrophic incidence 57%; poorest quintile 89% vs wealthier quintile 12%; mean outside-care cost US\$14 vs within-care cost US\$7.
Gabani <i>et al.</i> (2024)	National distributional analysis; published 2024	Secondary analysis (national datasets)	Redistributive effect / equity of public health system	Public healthcare reduces income inequality modestly; PHC services are pro-poor but equity can be strengthened through PHC prioritisation.

This approach is consistent with national reform commitments in the National Health Compact and with WHO guidance on financial protection and strategic purchasing (Government of Sierra Leone, 2025; WHO, 2025b).

Summary, Conclusion, and Recommendations

Summary

This assessment finds that Sierra Leone's Free Healthcare Programme has not yet delivered comprehensive affordability and financial protection. Official National Health Accounts indicate that out-of-pocket payments remained above 50% of current health expenditure in 2019–2020, while donors financed roughly one-third and the government less than one-fifth (MoH, 2023). The Digital Health Roadmap confirms a similar financing pattern, suggesting stable constraints (MoH, 2024). Household evidence from Freetown informal settlements indicates that costs increase substantially when care is sought outside local communities and that catastrophic spending is extremely concentrated among the poorest households (Fullah *et al.*, 2025). Equity analysis indicates that primary healthcare can be pro-poor and can reduce inequality, supporting PHC investment as a central affordability strategy (Gabani *et al.*, 2024). The synthesis points to medicines and diagnostic stock-outs, non-medical costs (transport/time), fragmented pooling and purchasing, and accountability constraints as dominant drivers sustaining 'hidden payments' under nominally free care (Audit Service Sierra Leone, 2024, 2025; Government of Sierra Leone, 2025; WHO, 2024).

Conclusion

Sierra Leone's Free Healthcare Programme represents a major UHC commitment, yet affordability remains constrained by persistent household payments and continued catastrophic expenditure risk among vulnerable groups. Administrative financing data show that households still bear the largest share of current health expenditure, suggesting limited risk pooling and insufficient protection at the point of need (MoH, 2023). Household evidence demonstrates that when care must be sought beyond local communities, costs rise and catastrophic spending becomes widespread among the poorest households (Fullah *et al.*, 2025). Under the revised SDG 3.8.2 definition, which assesses catastrophic spending relative to discretionary resources net of basic needs, these vulnerabilities are likely to remain visible unless OOP is reduced structurally (United Nations Statistics Division, 2025; WHO, 2025a). The National Health Compact and proposed SLAHC reforms create an opportunity to translate free-care commitments into practical entitlements by financing medicines, diagnostics, and referrals reliably, strengthening strategic purchasing and accountability, and monitoring equity-disaggregated financial protection outcomes (Government of Sierra Leone, 2025; WHO AFRO, 2025).

Recommendations

The government should prioritize increasing predictable domestic health financing and strengthening pooled prepayment mechanisms to reduce reliance on out-of-pocket payments. Medium-term budgeting should align with National Health Compact priorities, especially primary healthcare readiness and access to essential medicines. Enhanced public financial management and transparency are needed to ensure

resources reduce household costs and improve equitable access to services. The Ministry of Health should prioritize pharmaceutical and diagnostic assurance by improving forecasting, ensuring transparent procurement, and maintaining continuous stock monitoring across facilities. Predictable facility financing and stronger referral coordination are essential to prevent costs from shifting to patients. Digital health systems should be used to track commodity availability and discourage informal charges during free-care service delivery. Policy reform should advance integrated strategic purchasing under unified UHC governance, ensuring a clearly defined and financed benefits package that covers medicines, diagnostics, and referral-related costs. Routine monitoring with revised SDG 3.8.2 financial protection indicators and equity-focused reporting is essential to achieve measurable reductions in catastrophic health expenditure.

Further research should prioritize nationally representative econometric studies that measure catastrophic and impoverishing health expenditures using updated SDG methodologies. Future analyses should examine geographic and socioeconomic factors affecting affordability and assess financing reforms over time, providing evidence to guide policy implementation and strengthen financial protection monitoring within Sierra Leone's universal health coverage framework.

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