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POLICY BRIEF

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Experience, Preferences and Effects of Provider Payment Mechanisms in Tanzania

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This Policy Brief documents findings of studies held between 2023-2025 by IHI in collaboration with the London School of Hygiene and Tropical Medicine with funding from the Medical Research Council, UK.

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KEY POINTS

- **Achieving Universal Health Coverage (UHC) requires strategic health financing** – how funds are raised, pooled, and used to purchase healthcare services—especially through well-designed provider payment mechanisms (PPMs). PPMs influence provider behavior, affecting service delivery and efficiency.
- **Tanzania uses multiple PPMs** (e.g., fee-for-service and capitation), which creates mixed incentives and administrative burdens to providers. The 2023 Universal Health Insurance (UHI) Act presents a key opportunity to harmonise provider payment systems and align provider incentives for UHC.
- **Ifakara Health Institute (2023–2025) assessed the existing PPMs in Tanzania** – including NHIF's fee-for-service, ICHF and HBF's capitation, and SHIB's capitation and fee-per-visit—and found wide variation in implementation and provider experience, with deviations from intended design.
- **Providers raised consistent concerns** – low payment rates, delays, unpredictability, and burdensome reporting. NHIF's fee-for-service was viewed as more reliable and better at covering expensive services. Capitation was generally accepted, but providers preferred a capitation method which ensures timely and adequate payments, fair performance incentives, broad service coverage, and simpler reporting.
- **Service quality outcomes were broadly similar** – for clients under NHIF (fee-for-service) and ICHF (capitation), though NHIF clients under fee-for-service were more likely to be prescribed, reported better access to medicines and expressed greater trust in facilities compared to ICHF clients under capitation.
- **There is a need for well-designed PPMs for UHI** – that reflect provider preferences—such as adequate, frequent, and timely payments, fair performance and equity adjustors, and simplified reporting—while also strengthening broader system investments, routine oversight for fee-for-service, and ensuring fidelity to design.

2023

Year the Universal Health Insurance Act was legislated

The Law presents a key opportunity to harmonise provider payment systems and align provider incentives for UHC.

Providers raised consistent concerns, but preferred a capitation method which ensures timely and adequate payments, fair performance incentives, broad service coverage, and simpler reporting.

INTRODUCTION

Strategic purchasing is key for UHC, as it relies on deliberative design choices.

Achieving Universal Health Coverage (UHC) means ensuring everyone can access quality healthcare services without financial hardship. This requires strong health financing systems that include strategic revenue collection, pooling, and purchasing. Most low- and middle-income countries (LMICs) are undertaking reforms to mobilise more funds, expand prepayment mechanisms, and promote strategic healthcare purchasing.

Strategic purchasing relies on deliberative design choices –what to buy (benefit package), from whom (provider type), and how to contract and pay (contracting and provider payment mechanisms). Provider payment mechanisms (PPMs) – the methods by which providers (e.g., facilities and health workers) are paid pooled funds by purchasers (e.g., government, insurers, donor) –are important tools for strategic purchasing. Each PPM carries design features such as payment rate, frequency, schedule, performance requirements, and accountability mechanisms. These features send different economic signals or incentives to providers that influence their behaviours and responses and affect service delivery – both positively and negatively.

Evidence is needed to inform well-designed PPMs for UHI in Tanzania.

Many LMICs, including Tanzania, use a mix of multiple PPMs (e.g., fee-for-service, capitation, line-item budgets, and salary), which creates conflicting or mixed incentives and heavy reporting burdens to providers. Reforming and aligning PPMs toward strategic purchasing is essential to improve efficiency, accountability, provider performance, and value for money.

In 2023, the Government of Tanzania passed the Universal Health Insurance (UHI) Act, laying the foundation for a mandatory national health insurance scheme. Key design elements – such as the benefit package, premium contribution levels, and provider payment arrangements – are under development. Thus, evidence is needed to inform well-designed PPMs for UHI in Tanzania.

RESEARCH STUDY ON PPMS IN TANZANIA

Ifakara Health Institute (IHI) conducted a research study (2023-2025) to:

(i) Reviewed and map existing PPMs in Tanzania;
(ii) Understand provider and purchaser experiences with current payment systems;
(iii) Explore provider preferences for capitation design attributes; and
(iv) Assess the differential effects of NHIF fee-for-service and ICHF capitation on healthcare quality.

RESEARCH METHODS

The study applied a mixed-methods design at both national and sub-national levels, covering 84 primary healthcare facilities in Singida and Manyara regions. Data collection included: a review of documents; two rounds of qualitative interviews with 21 providers and managers; 14 group interviews with providers and managers; 10 interviews with purchasers; exit interviews with 475 clients; and a survey of 245 healthcare workers. The provider survey including a discrete choice experiment (DCE) for five capitation attributes. Data was collected in 2023 and 2024.

84

Number of primary healthcare facilities involved in this study

KEY FINDINGS

Part 1: The characteristics of key provider payment methods in Tanzania

PPM Characteristics	NHIF – Fee-for-Service (FFS)	ICHF – Capitation	SHIB – Capitation and Fee-per-Visit	HBF – Capitation
PPM reforms and rationale	Post-2012 shifted from a mix (FFS + capitation) to pure FFS to improve traceability and manage claims.	In 2017/18, capitation formula started with facility-level adjustors [60% utilisation, 30% enrolment and 10% population] to improve equity, efficiency, and accountability.	No documented reforms	In 2017/18, capitation formula started with facility-level adjustors to improve timely facility financing, autonomy, and responsiveness to needs – under DHFF.
PPM design to date	NHIF uses FFS –to pay contracted facilities after claim submission.	ICHF uses capitation with a utilisation adjustor only, due to impractical use of enrolment.	SHIB uses capitation (fixed rate per person annually by provider type) & fee-per-visit (for referrals).	HBF uses capitation– adjusted for 40% catchment size, 10% distance, 40% utilisation, 10% family planning use and drug availability.
Provider coverage	Broad network of providers (public + private), across levels.	Mostly public and faith-based PHC facilities.	Mixed (public + private), primarily urban-based.	Primarily public facilities and voluntary agency hospitals.
Payment flow by design	Retrospective—payment after service delivery and claims submission.	Retrospective—payment after service delivery and claims submission based on utilisation.	Retrospective—payment after service delivery and claims submission.	Prospective—payments made in advance before service delivery, no claims submission.
Payment schedule & timeliness	Payments within 60 days, but delays occur.	Monthly, with common delays due to claim processing.	Quarterly, with minimal delays reported.	Quarterly, but delays occur, sometime payments for two quarters at once.
Service coverage	Comprehensive benefit package across facility types (including specialised care).	Basic package PHC services up to regional level (general outpatient and inpatient care).	Outpatient services, drugs, tests and inpatient services cap (e.g., 42 inpatient days).	Covers PHC operation costs, including medicines, supplies, and utilities.
Performance incentives	No direct performance link, but payment depends on claims/ utilisation volume.	Uses utilisation as performance-based adjustor.	Considered indirectly (number of clients enrolled per facility).	Uses performance-based adjustors (e.g., service use, drug availability).
Accountability mechanisms	Requires detailed claims and verification.	Requires utilisation claims submission; verified via DHIS2.	Requires claims, with verification.	Lighter reporting required, based on routine DHIS2 utilisation data.

HBF uses capitation– adjusting for 40% catchment size, 10% distance, 40% utilisation, 10% family planning use and drug availability.

Notes: HBF-Health Basket Funds; PHC-Primary Health Care; SHIB-Social Health Insurance Benefit; Adjustors for government allocations to district councils – population (60%), poverty (10%), Under five mortality rate (10%) and capped land factor (20%).

Part 2: Provider experiences with existing payment methods in Tanzania

Theme	NHIF (Fee-for-service)	ICHF (Capitation)	HBF (Capitation)
Contribution to provider revenue	Key source of revenue for public and private facilities.	Minor revenue contributor due to implementation and enrolment challenges.	Significant source of revenue for facilities, especially in rural facilities.
Adequacy of payment rates	Partially inadequate – most providers (73%) said NHIF covered >60% of costs, while the gap was mainly due to deductions.	Highly inadequate – only 21% of providers said ICHF payments covered >80% of service costs.	Inadequate in urban facilities, and somehow adequate in rural facilities; but mostly disburse amount per ceiling identified.
Payment predictability	More predictable due to fixed reimbursement rates and somehow timely payments.	Unpredictable due to unclear formula and delayed payments. Only 14.4% of providers knew the formula.	Unpredictable in terms of timing for disbursement and moderate knowledge on adjustors; 48.3% of providers knew the capitation formula.
Service coverage	Broader range of services, including high-cost services like surgery and emergencies.	Basic PHC services up to regional level, which perceived as limited.	Basic PHC services, but indirectly covering other services through operation costs and drugs.
Adherence to payment schedules	Fluctuating adherence within 60 days: 63% of providers experienced delays.	Poor adherence to monthly: 80% of providers experienced delays.	Weak adherence to quarterly: 53% of providers reported delays up to 2 quarters.
Timeliness of payments	Average delay of 3.1 months, relatively better to other PPMs.	Longest delays: average of 5.5 months.	Delays averaged 4.5 months; better than ICHF but worse than NHIF.
Accountability & reporting burden	Requires claim submission (hard & soft copies) & verification; perceived complex & time-consuming.	Requires claim submission & verification, perceived heavy and burdensome.	Lighter reporting requirements, mainly routine DHIS2 data, which perceived easier to providers.
Performance-based adjustments	No explicit performance adjustor, but implicitly incentivising provision of more services.	Considered in capitation formula (utilisation), but with limited clarity in calculation.	Considered in capitation formula (utilisation & drug availability), but with limited clarity in calculation.

Clarify capitation formulas to providers to improve their awareness, reduce uncertainty, and support planning at the facility level.

Policy recommendations (Part 2)

- **Align payment rates with service costs:** Adjust payment rates across all methods, particularly capitation (ICHF, HBF), to better reflect the actual cost of services and reduce provider deficits.
- **Enhance payment predictability and transparency**
  Clarify capitation formulas to providers to improve their awareness, reduce uncertainty, and support planning at the facility level.
- **Ensure timely and reliable fund disbursement**
  Strengthen enforcement of payment schedules and streamline claim and verification processes to minimise delays and improve provider trust in the system.
- **Simplify and standardise reporting requirements**: Harmonize and simplify accountability mechanisms across PPMs, while building provider capacity for compliance and performance reporting.
- **Tailor performance incentives to local contexts:** Design fair, context-sensitive performance indicators/ capitation adjustors and ensure providers are engaged in the process to promote meaningful accountability and service improvement.

Part 3: Provider preferences for capitation design attributes

Generally, PHC providers were supportive of capitation payment model.

- However, only if it is well designed – with strong preference for a capitation model that is fairly adequate, frequent, timely, and includes performance-based incentives.

No.	Feature/ attribute	Provider preferences based on the discrete choice experiment (DCE)
1.	Adequate payment level	Prefer full funding to cover service costs, or allow client co-payment if reimbursement rates are low
2.	Service coverage	Prefer broad package that include outpatient and inpatient care, drugs and diagnostic tests
3.	Payment schedule	Prefer frequent payments especially monthly or quarterly
4.	Timeliness in payment	Prefer disbursements according to payment schedule, with no delays
5.	Performance incentives	Prefer models with performance-based adjustors to reward performance and quality care, but using fair and transparent indicators

Table: Most preferred features of capitation by PHC providers

Provider preferences differred by facility and health workers characteristics

- Preferences varied by facility level (district hospitals, health centers, and dispensaries), with mixed patterns across capitation payment attributes.
- Facility in-charges showed stronger preferences for well-designed capitation compared to normal staff, likely due to their managerial role in fund management at facility level.

Involve and account providers' views in designing the capitation model and choice of adjustors to build ownership and increase trust.

Policy recommendations for capitation design (Part 3)

- **Engage providers in capitation design**
  Involve and account providers' views in shaping the capitation model and choice of adjustors to build ownership, increase trust, and ensure it meets frontline needs.
- **Include equity and performance adjustors**
  Identify and use fair and context-specific capitation payment adjustors, such as indicators for workload, remoteness, and service quality to promote fairness and incentivise performance.
- **Ensure timely and predictable payments**
  Disburse funds per agreed schedule without delay to support smooth service delivery and maintain provider confidence, trust and responsiveness to population needs.
- **Cover a broad service package through expanded payment rate**
  Design reasonable payment rates to cover essential services as well as drugs and diagnostic services in the capitation package to avoid service gaps and out-of-pocket costs for clients.
- **Link capitation with quality assurance/ monitoring**
  Combine capitation with strong supervision, regular monitoring, and performance incentives to promote quality improvement and accountability.

Disburse funds per agreed schedule without delay to support smooth service delivery and maintain provider confidence, trust and responsiveness to population needs.

Part 4: Effects of provider payment methods on healthcare quality

A study compared Fee-for-Service (NHIF) and Capitation (ICHF) by capturing the experience of care from NHIF and ICHF clients after receiving services.

- **No significant difference in consultation or waiting time by payment methods**
  - *Average waiting (43 min) and consultation times (13 min) were similar across clients from two schemes with different payment methods.*
- **Better drug access to NHIF clients under fee-for-service**
  - *NHIF clients were more likely to be prescribed and access prescribed drugs at facility, compared to ICHF clients (capitation).*
- **No major difference in care quality gaps**
  - *Less than 11% of clients reported missed services or received unnecessary services/ referrals, with no significant variation between two schemes with different payment methods.*
- **Higher trust to facilities among NHIF clients under fee-for-service**
  - *NHIF clients (fee-for-service) reported greater trust in facilities than ICHF clients (capitation).*
- **No significant difference in adherence to clinical care content by payment methods**
  - *Adherence to ANC and OPD service standards remained low (~59% and 41%, respectively) across clients from both schemes with different payment methods (Fee-for-service & capitation).*

Align provider payment systems to guarantee timely, adequate funding across all populations, with equity-adjusted formulas to support underserved areas.

Policy recommendations (Part 4)

- **Reform and invest beyond payment methods**: Improving provider payment systems requires parallel investment in drug supply, data use, supervision, and accountability mechanisms to improve quality.
- **Ensure equity in drug access and trust**: Align provider payment systems to guarantee timely, adequate funding across all populations, with equity-adjusted formulas to support underserved areas.
- **Design fair and motivating payments**: Set transparent, regularly reviewed payment rates with performance and equity adjustors to maintain provider motivation and quality.
- **Strengthen oversight for fee-for-service**: Use strong verification and audit systems to reduce risks of overuse and cost escalation under FFS models.

Set transparent, regularly reviewed payment rates with performance and equity adjustors to maintain provider motivation and quality.

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In summary, this Policy Brief is the result of a collective effort. It reflects the commitment of researchers, funders, institutions, and stakeholders working together to strengthen health systems through evidence-based policymaking.

Disclaimer: The views expressed in this Policy Brief are those of the authors and do not necessarily reflect those of the Medical Research Council (MRC), UK Research and Innovation (UKRI), the Ifakara Health Institute (IHI), or the London School of Hygiene & Tropical Medicine (LSHTM).

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Further information

- The PPMT Project link: https://ihi.or.tz/our-projects/project/85/details/

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