Texila International Journal | Open Access | Peer Reviewed

Journal: Texila International Journal of Academic Research
https://doi.org/10.21522/TIJAR.2014.13.04.Art028

ISSN: 2520-3088
Volume 13 Issue 4, 2026

Three-Dimensional Fragmentation of Health-Care Purchasing and Universal Health Coverage in the Democratic Republic of the Congo

Charlie TCHOMBA TULIA

Department of Health Economics, School of Public Health, University of Kinshasa, Kinshasa, Democratic Republic of the Congo

Correspondence to be addressed: E-mail - ctchombat@gmail.com

Cite this article as: Charlie TCHOMBA TULIA. Three-dimensional fragmentation of health-care purchasing and universal health coverage in the Democratic Republic of the Congo. Texila Int J Acad Res. 2026;13(4). **https://doi.org/10.21522/TIJAR.2014.13.04.Art028**

Article Type: Review Article

Received: 13.07.2026
Accepted: 01.08.2026
Published: 30.10.2026

Abstract *Progress towards universal health coverage requires available resources to be purchased, allocated, and governed coherently. In the Democratic Republic of the Congo (DRC), analyses of health financing commonly focus on resource scarcity and reliance on out-of-pocket payments, while fragmentation of the purchasing function has received less attention. This analytical review examines fragmentation through three complementary dimensions: financing sources, provider-payment mechanisms, and the institutions that exercise or influence purchasing. A narrative synthesis of health-policy documents, institutional reports, and scientific literature was undertaken and informed by a qualitative comparison of six African country experiences. The analytical framework combines strategic purchasing, neo-institutional theory, and transaction-cost economics. The reviewed literature suggests that compartmentalised financial flows, parallel payment arrangements, and overlapping institutional responsibilities may increase coordination burdens, create unclear incentives for providers, and weaken accountability. The study proposes a three-dimensional model that makes these interactions visible and helps to organise reform options. It concludes that a transition towards more strategic purchasing in the DRC requires clearer purchasing governance, gradual harmonisation of payment arrangements, strengthened information systems, and explicit attention to equity. These priorities should accompany, rather than replace, the necessary expansion of resources for health.*

Keywords *Democratic Republic of the Congo, Fragmentation, Health Financing, Strategic Purchasing, Transaction Costs, Universal Health Coverage.*

This article is published under Creative Commons Attribution License (CC BY 4.0)

https://doi.org/10.21522/TIJAR.2014.13.04.Art028

Introduction

Universal health coverage is a central objective of contemporary health policy. It requires that all people can use the health services they need without experiencing undue financial hardship. Achieving this objective depends not only on the volume of resources mobilised, but also on how these resources are pooled, allocated to providers, and monitored. From this perspective, health-care purchasing is not merely an administrative step: it organises the conversion of financial resources into health services. Kutzin demonstrated that health financing encompasses revenue raising, pooling, and purchasing; the interaction of these functions shapes equity, efficiency, and financial protection [1, 2].

Strategic purchasing refers to active decisions about which services to buy, which providers to contract, which payment methods to use, and which monitoring arrangements to establish [3, 4]. It differs from passive purchasing based on the automatic continuation of historical budgets or on unregulated reimbursement of expenditure. In resource-constrained health systems, strategic purchasing can focus funding on health priorities, support quality of care, and limit inefficient expenditure. However, purchasing instruments do not have identical effects across settings. Their effectiveness depends on coherent rules, implementation capacity, the availability of inputs, and clear institutional responsibilities.

In the DRC, efforts to advance universal health coverage take place in an environment characterised by substantial health needs, a major contribution of households to health-care financing, and the presence of multiple partners and programmes. Research on health financing in sub-Saharan Africa shows that fragmentation extends beyond the multiplicity of financing sources. It may also arise from separate benefit packages, competing payment rules, parallel reporting systems, and overlapping decision-making bodies [5-7].

This article examines fragmentation from the perspective of health-care purchasing. Its contribution is twofold. First, it develops a three-dimensional model that distinguishes fragmentation of sources, mechanisms, and institutions. Second, it interprets the possible effects of this fragmentation through neo-institutional theory and transaction-cost economics. The objective is not to assign causal effects to a single mechanism, but to clarify the plausible pathways through which uncoordinated purchasing arrangements may undermine efficiency, equity, and accountability.

Materials and Methods

Study Design and Analytical Positioning

This study is an analytical thematic review combined with a structured qualitative comparison. It is neither an impact evaluation nor a primary statistical analysis. This design was selected because institutional and scientific documents are available on health financing, health-care purchasing, performance-based financing, financial protection, and governance reforms in the DRC and in other African countries. The analysis seeks to develop a reasoned interpretation of institutional mechanisms rather than to establish a causal effect attributable to a specific intervention.

Documentary Sources and Selection Criteria

The corpus included scientific publications, methodological documents from the World Health Organization, public reports from international institutions, and health-policy documents related to the DRC. Sources were retained when they addressed at least one of the following dimensions: health-financing functions, strategic purchasing, provider-payment methods, performance-based financing programmes, purchasing governance, universal health coverage, financial protection,

or health-service organisation. Purely descriptive texts unrelated to these themes, documents with unverifiable provenance, and sources for which the year or producing institution could not be identified were excluded.

The comparison covered Rwanda, Ghana, Kenya, Burkina Faso, Ethiopia, and Tanzania. These countries were purposively selected because of the diversity of their institutional arrangements, the availability of documented reforms, and their analytical relevance to the DRC. The comparison does not seek to rank countries or to mechanically transfer a model. Rather, it identifies design principles, implementation conditions, and recurrent risks.

Analytical Framework and Synthesis

The main framework is strategic purchasing, which links the content of the benefit package, provider selection, payment mechanisms, contracting arrangements, governance, and performance monitoring [3, 4]. It is complemented by North's neo-institutional theory, according to which formal and informal rules shape behaviour and incentives [8]. Williamson's transaction-cost economics is used to examine the burdens associated with negotiation, verification, information exchange, and contract monitoring [9].

Documents were reviewed using a common analytical grid. Relevant evidence was organised according to the three fragmentation dimensions and four potential effects: coordination costs, divergent incentives, inequalities in coverage, and accountability challenges. A narrative synthesis was then developed using transparency principles for narrative reviews: explicit description of sources, identification of convergences and contradictions, and a clear distinction between documented findings and interpretation [10, 11].

Methodological Limitations

This study has several limitations. Available documents do not cover the same periods, use identical indicator definitions, or provide data of equivalent quality. Literature on payment reforms may also reflect project-specific contexts that do not represent the health system as a whole. The international comparison is qualitative and does not demonstrate that one arrangement is automatically superior in every context. Finally, the use of public secondary data does not allow detailed examination of local practices and informal norms. These limitations mean that the article's proposals should be interpreted as a basis for policy reflection and further research.

Results

A Three-Dimensional Model of Purchasing Fragmentation

Purchasing fragmentation can be understood as the lack of effective alignment among actors, resources, and rules that transform financing into care. It occurs across three related but distinct dimensions. The first concerns sources: public budgets, household payments, insurance, external financing, projects, and earmarked funds. The second concerns mechanisms: operating grants, fee-for-service payment, salaries, capitation, input purchasing, performance-based financing, targeted exemptions, and service contracts. The third concerns institutions: the ministry of health, technical directorates, purchasing agencies, vertical programmes, provincial authorities, development partners, and provider organisations (Table 1).

Multiple sources are not inherently problematic. They become problematic when flows are managed through incompatible rules, when information does not circulate among purchasers, or when providers must comply with contradictory requirements. Likewise, the coexistence of several payment methods may legitimately address different objectives,

including basic financing, quality improvement, equity correction, or coverage of costly services. It becomes inefficient when the payment mix is not designed as a coherent whole.

Table 1. Three-Dimensional Framework for Analysing Purchasing Fragmentation

Dimension	Potential Manifestations	Consequences to Examine
Financing sources	Public budgets, external projects, out-of-pocket payments, insurance schemes, and earmarked funds managed separately.	Limited pooling; incomplete visibility of resources; dispersed spending priorities.
Purchasing mechanisms	Salaries, historical budgets, fee-for-service payments, conditional grants, input purchasing, and parallel exemptions.	Divergent provider signals; administrative complexity; risk of over- or under-incentivisation.
Institutions	Responsibilities shared among regulators, purchasers, vertical programmes, provincial levels, and partners.	Diffuse accountability; slow decisions; overlapping controls; coordination challenges.

Source: *Author's Development Based on [1-4, 8, 9].*

Fragmentation of Sources: Multiple Resources and Limited Visibility

Health systems in low- and middle-income countries commonly rely on a combination of tax revenue, out-of-pocket payments, insurance contributions, and external assistance. This combination can support service delivery when it is coordinated, predictable, and guided by shared rules. Conversely, it may lead to de facto segmentation when each source finances a different package, imposes separate procedures, or prioritises specific geographical areas and population groups. Literature on financing fragmentation indicates that programme-specific funds can facilitate rapid progress in particular areas, but may also reinforce silos when they are not integrated into national planning and purchasing arrangements [5-7, 12].

In the Congolese context, the issue is therefore not solely the overall level of resources. It also concerns the system's ability to identify available financing, align it with health needs, and prevent one stream from substituting for another. Out-of-pocket payments are especially important because they are not an institutional strategic-purchasing mechanism: they depend on the patient's immediate ability to pay. When they finance a substantial share of services, they may restrict access, delay care seeking, and weaken risk pooling [13, 14].

Fragmentation of Mechanisms: The Need for Coherent Incentives

Provider-payment methods influence provider behaviour. A salary may secure income and facilitate staff presence, but it does not necessarily create a direct incentive to increase activity or improve particular quality processes. Fee-for-service payment can stimulate service provision but may also encourage unnecessary volumes when safeguards are absent. Capitation creates incentives for cost control but requires adjustment for health needs and referral arrangements to avoid risk selection. Performance-based financing can make priority objectives more visible, but its effects depend on the availability of inputs, the quality of verification, and compatibility with other financing sources [15-17] (Table 2).

The relevant question is therefore not whether to choose a single mechanism, but how

to define an explicit payment mix. A mixed architecture may distinguish financing for fixed costs, purchasing of priority services, protection of vulnerable people, and remuneration for quality improvements. Without coordination rules, providers may be encouraged to prioritise the most visible activities, those that are easiest to report, or those that are best remunerated, at the expense of equally essential but insufficiently funded services. Administrative workload can also become excessive when each mechanism requires separate registers, controls, and reports.

Table 2. Main Provider-Payment Mechanisms and Risks of Fragmentation

Mechanism	**Potential Purpose**	**Risk When Implemented in Isolation**
Operating budget or global grant	Support fixed costs, service continuity, and readiness of the supply side.	Allocation may remain weakly responsive to needs or quality when based strictly on historical levels.
Salary	Provide predictable remuneration for staff.	Weak relationship with effective availability, quality, or activity in the absence of supervision.
Fee-for-service payment	Remunerate services that are actually delivered.	Incentive to increase service volumes and persistence of financial barriers for households.
Capitation	Finance an enrolled population and encourage prevention.	Under-provision or risk selection if the payment is not adjusted and monitored.
Performance-based financing	Emphasise selected services or verifiable results.	Focus on remunerated indicators; verification costs; dependence on external inputs.
Equity funds or exemptions	Reduce financial barriers for vulnerable groups.	Inaccurate targeting, delayed reimbursement, or financial fragility of health facilities.

Source: *Author's Synthesis Based on [3, 4, 15-17].*

Institutional Fragmentation: Separation of Roles and Accountability

Purchasing governance requires, at least functionally, a distinction among regulatory, financing, purchasing, provision, and oversight responsibilities. In practice, these functions may be performed by several entities, provided that their mandates are clear and coordination rules are operational. Conversely, when roles overlap without an explicit decision-making mechanism, accountability becomes diffuse. It becomes difficult to identify who is responsible for defining the benefit package, selecting providers, ensuring contract quality, or settling payments.

Institutional theory helps interpret this problem beyond formal organisational charts. A reform may introduce contracts, indicators, or a new structure, but its operation depends on pre-existing work practices, authority relationships, and norms of exchange. The central issue is the fit between new rules and available administrative capacities. When an arrangement demands more rapid or more detailed information than health facilities can produce, it may generate weak data or excessive workload without commensurate benefit [8, 18].

Plausible Mechanisms of Inefficiency

The synthesis identifies three interpretive mechanisms. The first is dilution. When limited resources are distributed across numerous channels, an increasing share may be absorbed by the management of agreements, accounts, controls, and reports. The multiplication of such operations corresponds to transaction costs in Williamson's sense. This does not mean that all verification is unnecessary: control is essential for quality and integrity. The problem arises when verification is redundant, poorly targeted, or disproportionate to risk.

The second mechanism is contradictory incentives. Multiple purchasers may communicate different and sometimes competing priorities to the same providers. One programme may reward completion of an indicator, another the availability of a commodity, while the health facility still relies on out-of-pocket payments to cover day-to-day operating costs. In the absence of prioritisation, providers may adapt locally in rational ways that are not necessarily consistent with public-health objectives. This issue is particularly relevant for integrated services that require staff, medicines, reliable data, and continuity of care at the same time.

The third mechanism is an accountability gap. When several institutions finance, monitor, and direct activities without a shared decision framework, no actor fully bears responsibility for the overall result. Service users may then have few clear avenues for reporting failures, while local authorities may have to respond to multiple requirements. The consequence is not necessarily an absence of control, but fragmented control focused on compliance with individual project rules rather than on continuity and equity of care.

Comparative Lessons from African Countries

The countries included in the comparison (Table 3) are not models to be copied without adaptation. They nevertheless offer useful lessons. Rwanda is frequently discussed in the literature because of the progressive alignment of community-based insurance, provider financing, and monitoring arrangements. The principal lesson is not the adoption of a particular instrument, but the coherence built among basic financing, governance, and information improvement [16, 19].

Ghana illustrates the importance of a national purchaser able to define reimbursement rules and a benefits package, while also facing sustainability challenges and payment delays. Kenya shows that decentralisation can bring decision-making closer to local needs, but requires management capacity, predictable transfer rules, and strong coordination across levels of government. Burkina Faso has contributed to reflection on performance-based financing by showing that incentives cannot replace the availability of inputs or equity measures. Ethiopia and Tanzania further show that expanding financial protection is a gradual process that depends on strengthening service delivery, local governance, and public trust [6, 13, 17].

Table 3. Qualitative Comparison of African Experiences in Healthcare Purchasing and Financing

Country	Experience Examined	Cautious Lesson for the DRC
Rwanda	Progressive alignment of insurance mechanisms, provider financing, and monitoring.	Seek coherence among the purchaser, information systems, basic financing, and gradual supply-side improvement.
Ghana	Role of a national insurance scheme in financing and purchasing services.	An organised purchaser requires sustainable financing rules and predictable payments.

Kenya	Decentralisation and transfer of responsibilities to subnational levels.	Decentralisation requires local capacity, clear mandates, and intergovernmental coordination.
Burkina Faso	Performance-based financing experiences and equity measures.	Incentives must be aligned with inputs, supervision, and protection for vulnerable populations.
Ethiopia	Gradual development of financial-protection mechanisms and primary health care.	Supply-side strengthening and institutional trust condition the expansion of coverage.
Tanzania	Multiple financing arrangements and efforts to increase pooling.	Gradual consolidation of arrangements is preferable to layering poorly coordinated schemes.

Source: *Author's Synthesis Based on [5, 7, 16, 17, 19].*

Discussion

Conceptual Contribution: Making Purchasing Fragmentation Visible

The central contribution of this study is to move the analysis of fragmentation beyond the diversity of financing sources alone. Three-dimensional fragmentation helps explain why a reform limited to payment methods or resource mobilisation may produce inconsistent results. A payment arrangement can be technically well designed yet fail to improve services if it is introduced where inputs are unavailable, responsibilities are ambiguous, or the information required for verification is unreliable.

The model does not claim that all plurality is harmful. Health systems often use several instruments because they pursue several objectives. Financing staff availability, purchasing essential medicines, incentivising selected activities, protecting households financially, and responding to emergencies do not necessarily require the same mechanism. The key policy question is one of architecture: which functions should be integrated, which may remain distinct, and which mechanisms can ensure coordination among them?

Implications for Strategic Purchasing in the DRC

A first implication is the need for a national mapping of purchasing flows and rules. For every financing source, the map should identify the manager, the relevant benefit package, eligible providers, payment methods, reporting requirements, and verification arrangements. It should be updated regularly and shared across national, provincial, and local levels. Without such visibility, harmonisation remains declaratory.

A second implication is the development of a national framework for mixed provider payments. The framework should specify the function of each instrument and prevent multiple purchasers from financing the same activities under incompatible rules. A predictable grant could support unavoidable facility costs. Payments linked to quality or performance could be directed to a limited number of genuinely measurable priority indicators. Equity arrangements should protect groups for whom out-of-pocket payments are a major barrier. The choice of parameters should be preceded by feasibility assessments, analyses of administrative costs, and consideration of distributional effects.

A third implication concerns governance. A more coherent purchasing function does not necessarily require the immediate creation of an entirely new institution. It first requires clearly defined mandates, transparent decision-making arrangements, conflict-of-interest safeguards, and consultation mechanisms involving provinces, providers, and service-user

representatives. In the longer term, the option of a public purchaser with functional autonomy may be considered, provided that its financing, oversight, and legitimacy are clearly established.

A fourth implication relates to information systems. Digitalisation can reduce delays and facilitate data consolidation, but it should not create an additional reporting channel. Investments should promote interoperability, local use of data for decision-making, protection of sensitive information, and verification that is proportionate to risk. The guiding principle is straightforward: information requested from health facilities should have a demonstrable use for service improvement or accountability.

Future Research

The proposals advanced here require empirical testing. Future work could develop a quantitative inventory of financing sources and calculate concentration indicators using explicitly defined categories. It could also measure transaction costs by distinguishing expenditure on contracting, oversight, information management, and coordination. Case studies in health zones could examine how providers arbitrate among multiple purchasing arrangements. Finally, quasi-experimental evaluations or longitudinal analyses would be needed to estimate the effects of specific reforms on service utilisation, quality of care, and financial protection. Comparable institutional questions have also been documented in other regions, including Latin America and the Caribbean [20].

Conclusion

Fragmentation of health-care purchasing is a structural issue for progress towards universal health coverage in the DRC. The analysis shows that fragmentation should be examined simultaneously across financing sources, payment mechanisms, and institutions. Coordination difficulties, divergent incentives, and diffuse responsibilities are plausible mechanisms through which poorly aligned arrangements may limit efficiency and equity. The appropriate response is not the immediate uniformisation of all financing, but progressive consolidation: making flows visible, defining the role of each instrument, harmonising data requirements, strengthening accountability, and protecting households from out-of-pocket payments. These directions should be accompanied by sustained investments in service delivery and by rigorous empirical evaluations adapted to the Congolese context.

Conflict of Interest

The author declares no conflict of interest. The sources used in this review consist of scientific publications, institutional documents, and publicly accessible secondary data.

Acknowledgements

The author thanks the institutions and authors whose publications and documents made this analytical review possible.

Ethical Approval

This study relied exclusively on the analysis of publicly accessible documents and aggregated secondary data. It involved neither participant recruitment nor the use of identifiable individual data. Individual ethical approval was not required for the analysis described, subject to applicable institutional requirements.

Author Contributions

Charlie TCHOMBA TULIA: conceptualization, methodology, data curation, formal analysis, investigation, original draft preparation, review and editing, and project administration.

Funding

This research was self-funded.

Data Availability

The documents and data examined are derived from public secondary sources, including scientific publications and institutional documents cited in the reference list. Requests for any non-public administrative data should be directed to the relevant data-holding institution in accordance with its access procedures.

References

[1]. Kutzin J. A descriptive framework for country-level analysis of health care financing arrangements. Health Policy. 2001;56(3):171-204. doi:10.1016/S0168-8510(00)00149-4.

[2]. Kutzin J. Health financing for universal coverage and health system performance: concepts and implications for policy. Bull World Health Organ. 2013;91(8):602-11. doi:10.2471/BLT.12.113985.

[3]. Mathauer I, Dale E, Meessen B. Strategic purchasing for universal health coverage: key policy issues and questions. Health Syst Reform. 2019;5(1):20-33. doi:10.1080/23288604.2018.1557661.

[4]. World Health Organization. Strategic purchasing for UHC: unlocking the potential. Geneva: World Health Organization; 2019.

[5]. McIntyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, et al. Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. Bull World Health Organ. 2008;86(11):871-6. doi:10.2471/BLT.08.053413.

[6]. World Health Organization. The world health report: health systems financing: the path to universal coverage. Geneva: World Health Organization; 2010.

[7]. Sparkes SP, Kutzin J. A system-wide approach to analysing efficiency across health programmes. Health Syst Reform. 2019;5(3):183-94. doi:10.1080/23288604.2019.1581771.

[8]. North DC. Institutions, institutional change and economic performance. Cambridge: Cambridge University Press; 1990.

[9]. Williamson OE. The economic institutions of capitalism: firms, markets, relational contracting. New York: Free Press; 1985.

[10]. Popay J, Roberts H, Sowden A, Petticrew M, Arai L, Rodgers M, et al. Guidance on the conduct of narrative synthesis in systematic reviews. Lancaster: Lancaster University; 2006.

[11]. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101. doi:10.1191/1478088706qp063oa.

[12]. Dieleman JL, Schneider MT, Haakenstad A, Singh L, Sadat N, Birger M, et al. Development assistance for health: past trends, associations, and the future of international financial flows for health. Lancet. 2016;387(10037):2536-44. doi:10.1016/S0140-6736(16)30130-4.

[13]. World Health Organization, World Bank. Tracking universal health coverage: 2021 global monitoring report. Geneva: World Health Organization; 2021.

[14]. Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJL. Household catastrophic health expenditure: a multicountry analysis. Lancet. 2003;362(9378):111-7. doi:10.1016/S0140-6736(03)13861-5.

[15]. Figueras J, Robinson R, Jakubowski E, editors. Purchasing to improve health systems performance. Maidenhead: Open University Press; 2005.

[16]. Basinga P, Gertler PJ, Binagwaho A, Soucat ALB, Sturdy J, Vermeersch CMJ. Effect on maternal and child health services in Rwanda of payment to primary health-care providers for performance: an impact evaluation. Lancet. 2011;377(9775):1421-8. doi:10.1016/S0140-6736(11)60177-3.

[17]. Paul E, Renmans D. Performance-based financing in the health sector in low- and middle-income countries: is there anything more than a mantra? A systematic review. BMC Health Serv Res. 2018;18:206. doi:10.1186/s12913-018-2951-9.

[18]. Meessen B, Soucat A, Sekabaraga C. Performance-based financing: just a donor fad or a catalyst towards comprehensive health-care reform?

Bull World Health Organ. 2011;89(2):153-6. doi:10.2471/BLT.10.077339.

[19]. Lu C, Chin B, Lewandowski JL, Basinga P, Hirschhorn LR, Hill K, et al. Towards universal health coverage: an evaluation of Rwanda Mutuelles in its first eight years. PLoS One. 2012;7(6):e39282. doi:10.1371/journal.pone.0039282.

[20]. Mathauer I, Cavagnero E, Vivas G, Carrin G. Health financing challenges and institutional options for moving towards universal coverage in Latin America and the Caribbean. Bull World Health Organ. 2010;88(12):931-7. doi:10.2471/BLT.10.077537.