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Bridging the Gap Between Performance Assessment and Decision-Making in the Zambian Health System: Utilisation of Performance Assessment Findings in Luapula Province

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Abstract

Performance assessment is a key mechanism for strengthening accountability, learning, and service delivery within decentralised health systems. In Zambia, the Ministry of Health has institutionalised performance assessment through the Integrated Guidelines for Improved Health System Performance, which emphasise routine self-assessment, structured analysis, and follow-up action planning. However, evidence on how performance assessment findings are utilised for decision-making at district and facility levels remains limited. This study examined the utilisation of performance assessment findings for planning and decision-making in selected districts of Luapula Province. A descriptive mixed-methods design was employed, drawing on review of routine programme documents including facility and district-level meeting minutes, action point matrices, mentorship reports, and orientation reports related to performance assessment implementation. Data were thematically analysed across districts, hospitals, and rural health centres. Findings showed that performance assessments were largely conducted as required; however, translation of findings into structured analysis and actionable planning was inconsistent. Utilisation was facilitated by mentorship, job aids, and orientation on DHIS2 scorecards, while constraints included limited analytical capacity, weak documentation practices, unclear timelines, and inadequate feedback mechanisms. Guided by the Technology Acceptance Model and the Theory of Effective Use, the study highlights the need to strengthen data-to-action processes and district-level capacity to enhance effective utilisation of performance assessment findings.

Keywords: Performance Assessment, Health Systems Performance, Monitoring and Evaluation, Decision-Making, Data Use, District Health Management, Zambia

1. Introduction

Performance assessment (PA) plays a central role in strengthening accountability, learning, and continuous improvement within decentralised health systems (World Health Organization, 2017; Nutley *et al*., 2013) [16, 10]. When effectively utilised, performance assessment findings inform priority setting, guide corrective action, and support evidence-based planning at district and facility levels. However, in many low- and middle-income country settings, performance assessments are often conducted primarily for reporting compliance, with limited translation of findings into practical decision-making (Hung *et al*., 2020; Lee *et al*., 2021) [6, 7].

In Zambia, the Ministry of Health introduced the Integrated Guidelines for Improved Health System Performance to harmonise supportive supervision, performance assessment, and planning processes across all levels of the health system (Ministry of Health, 2022) [8]. The guidelines promote a structured problem-solving cycle based on **Assessment, Analysis, and Action (Triple-A)**, integrating performance against targets, performance against standards, and revision of action plans. Despite this framework and increased availability of digital tools such as scorecards and dashboards, utilisation of performance assessment

findings for decision-making remains inconsistent (Singini *et al*., 2023) [14].

Previous research conducted in Luapula Province demonstrated that information system competence, staff motivation, and routine data use significantly influence data quality at hospital level (Sishekanu & Muhyila, 2025). However, less is known about how performance assessment findings are utilised for planning and decision-making across district health systems. This study therefore examined utilisation of performance assessment findings in selected districts of Luapula Province.

2. Problem Statement

Performance assessment is intended to support evidence-based planning, accountability, and continuous improvement in decentralised health systems (World Health Organization, 2017) [16]. In Zambia, districts and health facilities are required to conduct routine performance assessments and use findings to inform corrective actions (Ministry of Health, 2022) [8]. However, assessments are frequently completed primarily to meet reporting requirements, while critical follow-up steps such as root cause analysis, bottleneck analysis, documentation of review decisions, and revision of action plans remain incomplete or delayed (Qian *et al*., 2023; Hung *et al.*, 2020) [12, 6].

Performance reviews are often verbal, weakly documented, and poorly linked to planning and supervision processes. Feedback mechanisms from districts to facilities are inconsistent, limiting accountability and sustained action (O'Hagan *et al*., 2017) [11]. Although studies have examined data quality and routine health information systems, limited empirical evidence exists on utilisation of performance assessment findings within district health systems in Zambia. This study sought to address this gap.

3. Study Objectives

3.1 General Objective

To examine the utilisation of performance assessment findings for planning and decision-making in district and facility health systems in Luapula Province, Zambia.

3.2 Specific Objectives

1. To assess the extent to which performance assessment processes are implemented at district and facility levels.
2. To examine how performance assessment findings are utilised to inform analysis, action planning, and decision-making.
3. To identify factors that influence effective utilisation of performance assessment findings.
4. To identify barriers that limit translation of assessment results into structured action and follow-up.
5. To explore the role of mentorship, orientation, and feedback mechanisms in strengthening utilisation of performance assessment findings.

4. Theoretical Framework

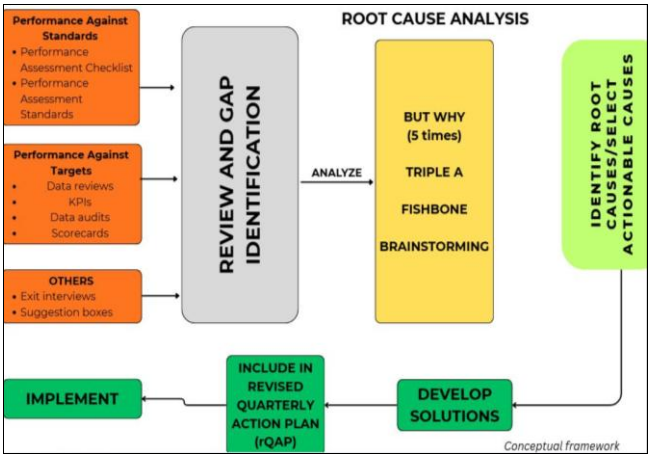
This study was guided by the **Technology Acceptance Model (TAM)** and the **Theory of Effective Use**.

The Technology Acceptance Model posits that adoption and use of information systems are influenced by perceived usefulness and perceived ease of use (Davis, 1989; Venkatesh & Davis, 2000) [3, 15]. Applied to this study, TAM explains acceptance of performance assessment tools such as scorecards and web-based platforms by district and facility teams.

The Theory of Effective Use extends beyond adoption by examining whether systems are used in ways that enable users to achieve intended organisational goals (Burton-Jones & Grange, 2013) [2]. In the context of performance assessment, the theory explains why assessments may be conducted without translating into structured analysis, documented decisions, or revised action plans. Effective use depends on analytical capacity, mentorship, feedback, and organisational support (Andersen, 2023 [1]; Shiferaw *et al*., 2021).

5. Conceptual Framework

The conceptual framework attempts to highlight the ideal setup in the use of the performance assessment findings. The model further suggests how the performance assessment findings aid operational management in improving service delivery through identification of performance gaps, conducting a detailed analysis to identify barriers to effective performance and developing interventions to countermeasure the barriers.



6. Empirical Review

Empirical literature consistently demonstrates that while routine performance assessment systems are widely implemented, utilisation of findings for decision-making remains limited in many settings (Hung *et al*., 2020; Lee *et al*., 2021) [6, 7]. Performance reviews are often conducted without formal documentation or follow-up, undermining accountability and learning (Rumisha *et al*., 2020) [13].

Mentorship, supportive supervision, and leadership and ownership have been shown to significantly improve data use and accountability (Gimbel *et al*., 2017; O'Hagan *et al*., 2017) [5, 11]. Evidence from Zambia similarly highlights persistent barriers to effective data use at district level, including weak feedback, limited analytical capacity, and fragmented coordination (Singini *et al*., 2023) [14]. Earlier work in Luapula Province further showed that competence and routine data use improve data quality but do not automatically translate into effective decision-making (Sishekanu & Muhyila, 2025).

7. Materials and Methods

7.1 Study Design

This study employed a **descriptive mixed-methods design** to examine how performance assessment findings were utilised for planning and decision-making at district and

facility levels in Luapula Province. The design was descriptive because the study sought to document and explain practices as they occurred in real programmatic settings, rather than to test hypotheses or quantify causal relationships. The mixed-methods approach enabled analysis of both structured and narrative information contained in routine programme records and implementation engagements.

7.2 Study Setting

The study was conducted in **Luapula Province, Zambia**, and focused purposefully on selected districts where performance assessment activities and mentorship engagements had been implemented. These districts included **Kawambwa, Mansa, Mwense, Samfya and Nchelenge**, representing a mix of rural and hard-to-reach settings, as well as urban health facilities. The study covered district health offices, district hospitals, and selected rural health centres within these districts.

7.3 Data Sources

Data for this study were drawn from **routine programme implementation sources** generated between **December 2025 and March 2026** as part of ongoing health system strengthening activities. These sources included:

- Facility-level performance assessment self-assessment records
- Facility and district review meeting minutes
- Action point matrices and revised action plans
- Mentorship and supportive supervision trip reports
- Orientation reports for district planners and District Health Information Officers on the web-based performance assessment tool

In addition to document review, **informal discussions were held with district and facility staff during routine mentorship, supervision, and review engagements**. These discussions were conducted to clarify observed practices, understand how performance assessment findings were being interpreted, and gauge staff understanding of analytical steps such as root cause analysis, bottleneck analysis, and action planning. The discussions were not structured interviews, but part of routine implementation engagement and learning processes.

7.4 Data Analysis

Data were analysed using **thematic analysis**. Programme documents were systematically reviewed to identify recurring patterns related to the utilisation of performance assessment findings, including evidence of analysis, planning, documentation, feedback, and follow-up. Insights from informal implementation discussions were used to **contextualise and triangulate documented practices**, allowing for interpretation of both what was recorded and how processes were understood and applied in practice.

The analysis was guided by the **Technology Acceptance Model**, which informed examination of acceptance and uptake of performance assessment tools, and the **Theory of Effective Use**, which informed assessment of whether these tools were applied in ways that supported structured decision-making and action.

7.5 Ethical Considerations

The study utilised only **routine programme documents and implementation engagements** conducted as part of ongoing health system management activities. No personal identifiers were collected or recorded, and no formal interviews or surveys were conducted. Permission to use programme documents for learning and research purposes was obtained through provincial health management structures. The study posed **no risk** to participants and was conducted in line with standard ethical practice for implementation research.

7.6 Study Variables

This study examined utilisation of performance assessment findings as the outcome of interest. Guided by TAM and the Theory of Effective Use, variables were examined conceptually and thematically rather than statistically.

Table 1: Study Variables

Variable Type	Variable	Operational Description
Dependent	Utilisation of PA findings	Evidence of RCA, BNA, revised action plans, documented decisions, prioritisation of support, and follow-up using PA findings.
Independent	Acceptance of PA tools	Uptake and use of scorecards, dashboards, and PA templates.
Independent	Analytical capacity	Ability to interpret findings and conduct RCA/BNA.
Independent	Mentorship & orientation	Availability of mentorship, supportive supervision, job aids, and training.
Independent	Documentation & feedback	Presence of written reviews, action points, timelines, and feedback mechanisms.
Independent	Leadership support	Leadership ownership, coordination, and follow-up on PA processes.

8. Results and Discussion

Findings from the review of routine programme documents indicate that performance assessment (PA) processes were widely implemented across districts and health facilities in Luapula Province. Most districts conducted facility self-assessments within the stipulated timeframes, and assessment tools such as scorecards, templates, and web-based platforms were available and actively used to generate performance results. This widespread implementation demonstrates a high level of acceptance of performance assessment tools, consistent with the Technology Acceptance Model, which emphasises perceived usefulness and ease of use as drivers of adoption.

However, while assessment activities were routinely undertaken, utilisation of PA findings for structured analysis and planning was inconsistent. In many instances, performance assessment results were reviewed at meetings, but the review process often stopped at the identification of low-performing indicators. Systematic analytical steps, particularly root cause analysis (RCA) and bottleneck analysis (BNA), were frequently absent or conducted informally without written outputs. Where action plans existed, they were often outdated and not revised to reflect current assessment findings.

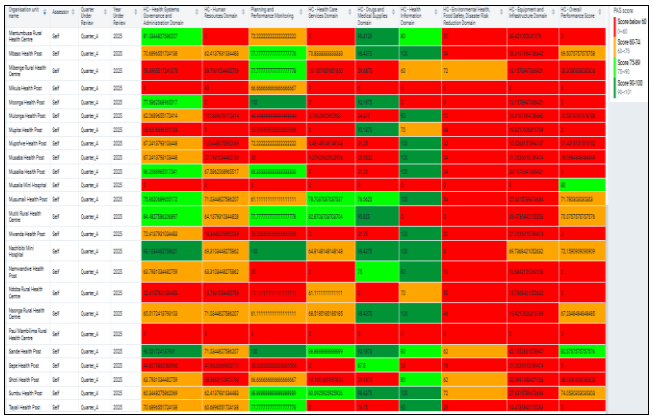


Fig: Performance Assessment Scorecard for Health Facilities in Mansa District, Luapula Province (Q4 2025)

This pattern reflects a clear distinction between use and effective use of performance assessment systems. According to the Theory of Effective Use, systems may be actively used to generate outputs without necessarily supporting achievement of intended organisational goals. In this study, PA tools were used to produce scores and ratings, but were not consistently applied in ways that enabled structured problem solving, prioritisation, and follow-through. The incomplete execution of the Assessment–Analysis–Action cycle therefore limited the effectiveness of performance assessment as a decision-support tool.

Documentation of practices further influenced utilisation outcomes. Performance review discussions were frequently conducted verbally, with limited recording of decisions, responsibilities, and timelines. Weak documentation constrained institutional memory and reduced accountability, as follow-up on previous action points was often unclear during subsequent review meetings. This finding reinforces evidence from other district health systems, where undocumented reviews undermine continuity and learning.

Mentorship, orientation, and use of job aids emerged as critical enablers of improved utilisation. Districts and facilities that received structured mentorship demonstrated improved confidence in interpreting PA findings, clearer understanding of analytical steps, and increased use of scorecards during review meetings. Orientation of district planners and District Health Information Officers enhanced their capacity to provide technical support to facilities, reinforcing analytical practices and documentation requirements.

Importantly, mentorship was most effective when combined with district leadership to enhance ownership and feedback mechanisms. Where district leadership actively reinforced follow-up, demanded documentation of review outcomes, and provided structured feedback to facilities, utilisation of PA findings improved markedly. This highlights the role of organisational context in enabling effective use, where leadership behaviour and accountability mechanisms shape how tools are applied in practice.

These findings are consistent with earlier evidence from Luapula Province linking information system competence and routine data use with improved performance outcomes (Sishekanu & Muhyila, 2025). They are also aligned with global literature emphasising mentorship, supportive supervision, and organisational support as key drivers of data-to-action processes (Gimbel *et al*., 2017; Hung *et al*., 2020) [5, 6]. Together, the results suggest that strengthening utilisation of performance assessment findings requires moving beyond tool deployment to deliberate investment in analytical capacity, mentorship, documentation, and leadership engagement.

9. Conclusion

Although performance assessments are widely implemented and accepted, effective utilisation of findings for planning and decision-making remains uneven in Luapula Province. Strengthening mentorship, analytical capacity, documentation practices, feedback mechanisms, and leadership ownership is essential to bridge the gap between assessment and action.

10. Recommendations

Based on the findings of this study, the following recommendations are proposed to strengthen the utilisation of performance assessment findings for planning and decision-making within district health systems.

a) Reposition performance assessment from a compliance requirement to a decision-support tool

Districts and health facilities should deliberately integrate performance assessment findings into routine planning, review, and supervision processes. Assessment results should consistently inform prioritisation, corrective action, and resource allocation, rather than serving primarily as reporting outputs.

b) Strengthen mentorship and technical supportive supervision focused on use of findings

Mentorship and supportive supervision should prioritise practical skills in interpreting performance assessment findings, conducting root cause and bottleneck analyses, and translating results into time-bound action plans, rather than focusing mainly on completion of assessment tools.

c) Institutionalise documentation and feedback mechanisms

Districts should standardise documentation of performance review discussions, action points, responsibilities, and timelines, and ensure structured written feedback to facilities. This will strengthen accountability, continuity, and follow-through across successive review cycles.

d) Build analytical capacity at district and facility levels

Targeted capacity-building initiatives should be implemented to strengthen analytical competencies among planners, District Health Information Officers, programme officers, and facility staff, particularly in root cause analysis, bottleneck identification, and use of performance scorecards to inform planning and decision-making.

Taken together, these actions will strengthen data-to-action processes and ensure that performance assessment functions as a meaningful management tool that supports continuous learning, accountability, and improved health system performance at district and facility levels.

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