Health Facility Ownership Type and Performance on HIV Indicator Data Reporting in Kenya

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Abstract. In low- and middle-income countries, private and public facilities tend to have highly variable characteristics, which might affect their performance in meeting reporting requirements mandated by ministries of health. There is conflicting evidence on which facility type performs better across various care dimensions, and only few studies exist to evaluate relative performance around nationally-mandated indicator reporting to Ministries of Health. In this study, we evaluated the relationship between facility ownership type and performance on HIV indicator data reporting, using the case of Kenya. We conducted Mann-Whitney U tests using HIV indicator data extracted from years 2011 to 2018 for all the counties in Kenya, from the District Health Information Software 2 (DHIS2). Results from the study reveal that public facilities have statistically significant better performance compared to private facilities, with an exception of year 2017 in reporting of counselling and testing, and prevention of mother-to-child transmission indicator categories.

Keywords. HIV-indicator reporting, health facility, ownership, performance,

1. Introduction

In most LMICs, health facilities are required by the Ministries of Health (MoH) to report on various HIV indicators to aid in monitoring and evaluation of HIV programs, advocacy, policy and decision-making. In general, reported indicators are expected to be timely, accurate and complete. Few studies exist that rigorously evaluate differences in performance, and reviews of performance by facility-type have often led to conflicting conclusions[1]. Ownership of health facilities has the potential to affect the performance of health facilities at meeting these HIV reporting requirements, yet rigorous evaluations on relationship between facility type and HIV indicator reporting are limited. With increasing use of national-level centralized electronic HIV-indicator data aggregation and reporting systems such as the District Health Information Software 2 (DHIS2), data now exists in several LMICs for these evaluations. The aim of this study is to establish the relationship of health facility ownership type with ability to meet HIV indicator

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reporting requirements, using the case study of Kenya. The reporting requirements assessed in this study are completeness and timeliness in facility reporting.

2. Method

A retrospective observational study was conducted in order to identify the relationship between facility type and performance on HIV indicator reporting in Kenya. Reporting data used was from years 2011-2018. From DHIS2, we extracted the following HIV indicator categories based on Kenya's MoH731² summary form: (i) HIV Counseling and Testing (CT), (ii) Prevention of Mother-to-child Transmission (PMTCT) of HIV, (iii) Care and Treatment (CRT), (iv) Voluntary Medical Male Circumcision (VMMC), (v) Post-Exposure Prophylaxis (PEP), and (vi) Blood Safety (BS). Mann-Whitney U tests were conducted in order to compare the two ownership types.

3. Results

There were no statistical significances in performance in reporting of VMMC and BS indicators, which are peripherally associated with the HIV programs. Statistically significant results in performance, and mean ranks for both private and public varied in the different indicators. Performance in completeness and timeliness also varied by year, with public institutions performing better across multiple indicators with the exception of year 2017 in reporting of HIV CT, PMTC indicators.

4. Discussion

Our study only looks at yearly dimensions, but further analyses could be done by county, facility level, and facility type. This work highlights the key potential of how aggregate reporting data can be used to inform decision-making. Qualitative studies can further help highlight factors promoting or hindering quality indicator reporting

5. Conclusion

In this study, we observed a general trend of public facilities in outperforming private facilities in timeliness and completeness of health facility reporting of nationally-mandated HIV indicators.

References

 S. Basu, J. Andrews, S. Kishore, R. Panjabi, and D. Stuckler, "Comparative performance of private and public healthcare systems in low- and middle-income countries: A systematic review," *PLoSMed* 9 (2012), 19.

² Comprehensive HIV/AIDS Facility Reporting Form