

Application of Quality Improvement Strategies on a Population-based HIV/AIDS Surveillance Project in Houston, Texas: Outcome analysis and Lesson Learned

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Abstract

Background

Accurate data collection is essential to maintaining the integrity of any survey or research effort. While the degree of impact from faulty data collection and data may vary by discipline and the nature of investigation, there is the potential to cause disproportionate harm when these research results are used to support public policy recommendations. The objective of this endeavor was to develop quality assurance strategies to check interviews and medical records abstracted at various levels of the data collection process to ensure that information is recorded consistently and completely.

Method: Data used for evaluation were obtained from the Medical Monitoring Project (MMP). MMP is national population-based surveillance system designed to assess clinical outcomes, risk behaviors and quality of HIV care. Houston is one of the 23 sites participating in the project. The project involved in-person interviews and medical record abstractions (MRA). Quality assurance strategies adopted included review of study protocol and documents, training, procedures to avoid errors and discrepancies, and protect data quality and integrity. A total of 350 MRA were reviewed and 11 interviews chosen at random were observed using standard guidelines. Descriptive analysis of the number of major and minor errors/discrepancies observed was conducted.

Results: Findings from the evaluation indicated that application of the quality assurance strategies resulted in less than 5% error compared to an average of 11.8% in the previous project cycles. Complete review of all abstracted records resulted in the identification and correction of major and minor errors/discrepancies in the MRA data and enhanced interviewers' performance.

Conclusions: The strategies used enhanced the data quality and integrity and ensured that the standard procedures and performance requirements were met.