

Title: Using quality improvement methodologies to improve quality of pediatric HIV care and initiation of ART – Tanzania

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Track/Category: E/24; Designing and Implementing Health Systems for Quality HIV Programs

Introduction: Supporting the Ministry of Health's (MoH) National HIV program in five regions of Tanzania, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) introduced quality Improvement (QI) initiatives to assess and improve quality of care provision. In 2010, using a structured QI approach EGPAF attempted to improve antiretroviral therapy (ART) uptake and retention among children.

Methods: Ten public health facilities, where less than 70% of enrolled HIV infected infants had started ART, were selected for improvement activities (Global AIDS System for Evaluation & Reporting, Jan-March 2011). Medical records of children aged 0 to 14 years were randomly selected to assess quality using internationally recognized indicators.

Results: Baseline assessment of 339 pediatric files from January to June 2011 revealed: 75% of eligible children started ART, 73% had clinical staging reflecting nutrition status, 68% had baseline CD4 test, 78% had a clinical review and 63% had adherence assessment in the last six months. Low rates of CD4 testing and incorrect WHO-staging resulted in some eligible children not starting ART. To improve, EGPAF and MoH staff provided on-site mentoring on WHO-staging using growth monitoring tools. Notes on files reminded clinicians to conduct CD4 testing, staff improved adherence counseling and traced defaulters.

A repeat assessment of 431 pediatric files from July to December 2011 suggested an overall statistically significant difference between baseline and repeat score at ($z = -2.812$, and $p = 0.0049$); 89% of eligible children started ART ($z = -2.497$, $p = 0.0125$), 87% had clinical staging reflecting nutrition status ($z = -2.395$, $p = 0.0166$), 77% had CD4 test at enrollment ($z = -2.092$, $p = 0.0364$), 86% of children had clinical review in the last 6 months ($z = -1.533$, $p = 0.1253$) and 81% had a documented adherence assessment ($z = 2.601$, $p = 0.0093$).

Conclusion: QI methods enabled staff to identify and focus efforts to improve WHO staging, CD4 testing, and adherence resulting in improved ART initiation, and retention in care.

Changes from Baseline after implementation of targeted Pediatric HIV improvement projects across 10 sites

