

**Track:** D: Operations and implementation research  
D1 Strategies for increasing efficiency of service delivery, evaluation of different models of service delivery

**Title:** **Utilising District Health Information System (DHIS) data to improve prevention of mother-to-child transmission (PMTCT) program access and outcomes in Metsweding district, Gauteng Province in South Africa.**

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**Location:** South Africa

**Key words:** Prevention of mother-to-child transmission (PMTCT), District Health Information System (DHIS) data

**Background:** Metsweding District has an antenatal HIV prevalence rate of 33.3% (ANC survey, 2009). According to 2009 District Health Information System (DHIS) data, 5532 pregnant women accessed antenatal services but only 54% were tested for HIV, 14% had CD4 testing done, 14% accessed antiretroviral (ART) prophylaxis, 27% of eligible pregnant women were initiated on ART and the HIV infection rate by polymerase chain reaction (PCR) in exposed infants ranged from 11% to 14% (DHIS 2009). Changes could be made in DHIS within six weeks if data could be verified by sites by getting a copy of their monthly DHIS data, cross checking it with the data that was sent and report any identified errors to DHIS team for correction.

**Methods:** Quality improvement (QI) strategies to improve PMTCT services were initiated in July 2009 by EGPAF. These included process mapping to identify gaps, training of health-care workers on data management and QI methods, goal setting e.g. to reduce PCR positivity rate from 11-14% to <5% within one year, formation of QI teams, initiation of improvement cycles, implementation of two-way data flow processes where data is sent back to sites for verification every month, mentoring, coaching and QI learning sessions for all site staff.

**Results:** Between July 2009 and July 2010 improvements were noted in the PMTCT cascade: HIV counselling was offered to all pregnant women, HIV testing of pregnant women improved from 54% to 92%, all HIV-positive women received CD4 testing and results, ART prophylaxis improved from 14% to 96%, initiation of eligible pregnant women on ART improved from 27% to 66%, and the PCR positivity rate decreased from 11-14% to 5%.

**Conclusion:** Data management initiatives should be complemented with QI interventions to ensure improved outcomes. Two-way data flow processes should be encouraged to verify data within the six-week DHIS timeframe.