

### 3 TUBERCULOSIS AND HIV

#### a Implementation of a National HIV rapid testing quality assurance and quality improvement programme

Since 2010, the National Department of Health (NDoH) has implemented large-scale HIV rapid testing campaigns to ensure that all South Africans are aware of their HIV status. HIV rapid testing devices (RTD) are the major means for testing for HIV infection in South Africa. The RTDs are robust - laboratory-based evaluations have shown that the performance of these devices in terms of sensitivity and specificity is equivalent to laboratory methods such as ELISAs.

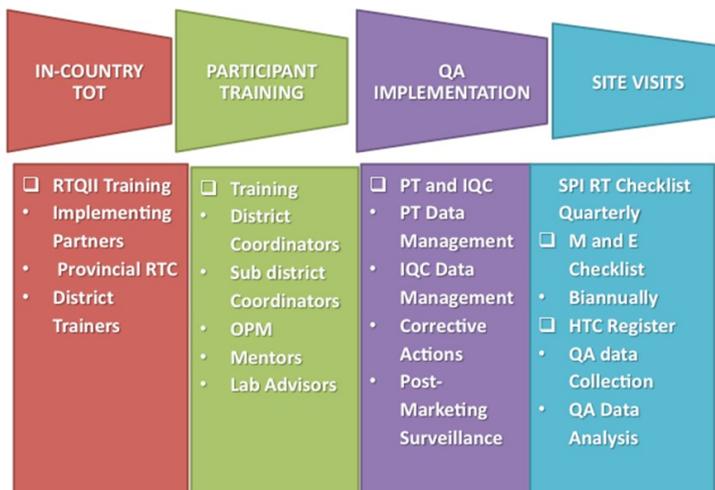
The major challenge in the use of HIV RTD is quality assurance of testing. The rapid expansion of HIV testing in South Africa has outstripped the implementation of quality assurance activities. A recent PEPFAR-supported initiative launched in South Africa is the Rapid Testing Quality Assurance and Quality Improvement Initiative (RTQII, Figure 4). The RTQII implementation is led by the NICD in partnership with the National and Provincial Departments of Health (HCT coordinators), CDC-Pretoria, CDC and USAID Development Partners and the NHLS. The initial rollout of the RTQII programme to date has occurred in PEPFAR-selected priority facilities. The focus of the RTQII is training on HIV rapid testing quality assurance (QA) and monitoring the implementation of QA. The monitoring of QA is through the use of a specific tool, the Stepwise Process for improving the quality of HIV Rapid Testing (SPI-RT) checklist. The tool assesses seven elements to determine whether the sites (1) provide accurate and reliable results; (2) are managed appropriately and adhering to quality practices and (3) require support to improve quality of testing. The elements include: training and certification; the physical facility; safety; (EQA). A

standardised scoring system is applied and facilities are placed in four possible levels from 0 to 4 of competence with level 0 requiring immediate remediation and level 4 eligible for certification.

From its inception in September 2014 until December 2015, 850 facilities have received training on quality assurance and baseline SPI-RT checklists have been applied in 170 facilities in the Eastern Cape and Free State provinces. One hundred and sixty-eight (168, 98.8%) facilities have started implementing the QA-QI programme. The outcome of the baseline assessments show that sixty-two facilities (37%) attained Level 1 compliance (partially eligible for certification) and 106 (63%) attained level 2 compliance status (close to national site certification). Key problem areas identified included: no training records, no inventory management for storage of test kits, no standard operating procedure documents or job aids; test procedures not adhered to, QC logs not reviewed and no participation in proficiency testing.

The RT-QII programme parallels other NDoH-led initiatives such as the "Ideal Clinic" programme that focus at facility level to improve health services. The triangulation of the different initiatives will be essential to obtain a global perspective on meeting specific requirements for the UNAIDS 90-90-90 targets, which includes accurate HIV testing.

**Source:** Centre for HIV and Sexually Transmitted Infections, NICD-NHLS ([adrianp@nicd.ac.za](mailto:adrianp@nicd.ac.za))



**Figure 4.** A schematic diagram illustrating the pillars of the Rapid Testing Quality Improvement Implementation (RTQII) strategy for HIV rapid testing. TOT: Train-the-Trainer; RTC: Regional Training Centre; OPM: Operational Manager; PT: Proficiency Testing; IQC: Internal Quality Control; M&E: Monitoring and Evaluation; HTC: HIV Testing and Counselling