Unique identifiers: How can unique identifiers operationally be used in tracking the mother and the baby?

- **Dr. Candice Fick (South Africa):** The unique identifiers are part of the child health record, allocated shortly after birth. There are stickers listing this identifier which can be attached to lab request forms—these will be captured with the specimen. This means that if the unique identifier were to be searched at the lab, all relevant results for that baby would easily be picked up.

- **Dr. Lucy Ranoto (South Africa):** A mother’s unique identity number that will be used by the clinical and laboratory services in all her baby’s HIV tests for easy tracking and linkage of the baby to the mother. The mother’s ID is used across all the baby’s results. The same ID can be used when recording in the health information system to easily identify and follow up with the mother-baby pair. In South Africa, TIER.net can be used to record the mother and baby pair, if the PMTCT module can be developed. Reports can be drawn that will identify:
  - All mothers due for viral load testing, all mothers to collect treatment, all mothers to collect IPT
  - All babies to collect birth PCR/birth PCR results
  - All babies to collect ART prophylaxis
  - All babies to collect cotrimoxazole prophylaxis
  - Trace all babies for HIV testing according to the HIV testing guidelines
  - Linkage to care of all HIV-positive babies
  - Defaulters and lost to follow-up at any stage for tracing

**EID Nurses:** What are your thoughts on the scalability and sustainability of specific EID nurses, and how much does that set us back in our quest for service integration?

- **Dr. Lucy Ranoto (South Africa):** The EID nurse should not be a specific individual dedicated only to EID, but rather a champion among her peers to encourage others to include key tasks into their normal routine. In this way, it promotes service integration, with EID forming a natural part of postnatal care.
• **Dr. Esther Tumbare (Lesotho):** We found that there was minimal need for EID-specific nurses as there was great buy-in from nurses working in the MNCH department to run samples for HIV-exposed infants.

**Electronic databases:** Is there any country that has linked electronic patient monitoring database with OVC database to trace children who are lost to follow up?

• **Dr. Candice Fick (South Africa):** This has not yet been done in South Africa, I am not aware that it has been done in other countries.

**South Africa: Data-Driven Strategies to Improve EID and Linkage to Care**

**EID Champions:** What is the selection criteria for EID champions?

• Usually a professional nurse working in postnatal care with PMTCT for infants is a good choice. Key is someone who is passionate about PMTCT and EID, who can motivate other members of his/her team to support the EID interventions.

**South Africa: EID in Mopani District, Limpopo, South Africa: Improving Linkage to Care through a Mother and Baby Pair Tracking Tool**

**Home deliveries:** What suggestions would you give to countries where most deliveries are out of the health facilities and babies only get chance to contact the health facility after they have had an episode of illness? Some mothers opt to deliver from their homes for several reasons.

• The use of ward-based outreach teams or community health workers. These are the people that are from within the community, that have access to the community and all households without transport issues, etc. They should be adequately trained to comprehensively screen, identify, and refer all the high risk conditions to the nearest health facility (including pregnant women and children). They should be knowledgeable to offer education about HIV and other pregnancy related conditions and work hand-in-hand with community and door-to-door HIV testing teams. Their roles include:
  — Among other conditions, identify all HIV-positive pregnant women
  — Linkage to care for all newly diagnosed HIV-positive women
  — The PMTCT tracking tool can be used to track all HIV-positive pregnant women from first consultation to infants’ 18 months testing.
  — Mothers and babies can be recorded in the tracking tool at any point in time, tracked as a pair until 18 months testing.
  — Women in labor can be referred to the health facilities (in South Africa, Department of Health to motivate for obstetric ambulances easily accessible to the communities)
— The same program can be used to identify high risk conditions in children under 5. Trained to do nutritional assessments (e.g., MUAC, weight, etc.)
— Clinical specialist teams (obstetrics and pediatrics), if available, can be part of the outreach teams. Each team has a team leader who is a PHC
— Adequate training with specific focus on maternal and child health.
— In South Africa, in Mopani district, the district clinical specialist physician developed an extra 10-day training specifically to cover maternal and child health
— South Africa has developed a one-year intensive training for community health workers
— Adequate supervision by a primary health care nurse
— Yearly updates and refresher trainings

Lesotho: EGPAF Efforts to Optimize Early Infant HIV Diagnosis and ART Initiation for HIV-exposed Infants in Lesotho

Turnaround time: What could be the reasons for a wide range of TAT (13–161 days)?
• With conventional processing of EID samples (pre-POC), DBS samples are collected from over 250 health facilities in Lesotho and transported via a transport system primarily made up of motor bike riders to a centralized lab for processing. Riders only visit health facilities once or twice per week. Results are returned the same way. Some facilities are closer to the National Reference Lab than others and so distance from the lab will also determine how long the TAT will be. How frequently the riders visit also determines TAT. Some health facilities take the initiative to chase their results from the lab, particularly when they have an ill child.

Rejected/invalid results: For the turnaround time of POC EID results, were there cases of rejected/invalid results and if so was this taken into account in the results?
• Yes, there were cases of rejected/invalid results (though very few). These were not included in the analysis.

EID coverage: Did you see an increase in EID coverage with rollout of POC (i.e., did the number of expected HEI who were tested improve)? I have concerns that while POC has improved TAT for results and timely ART initiating, but overall testing coverage is only improving slightly indicative of more upstream challenges such as poor retention in PW and subsequent enrollment of HEI.
• There was an increase in EID coverage as compared with expected HEI as evidenced by the achievement of over 90 percent targets.

Maintenance: How are you handling the Cepheid Xpert maintenance?
• There are four levels of maintenance—weekly, monthly, quarterly, and annually. The end users are trained to perform maintenance for the first three, and the UNITAID team assists with annual maintenance. Cepheid is only called in when there are major issues or breakdowns.

POC platforms: How did the two platforms compare? Why were almost 50 percent of the POC machines stopped to be used within the short time? Do the platforms require cartridges or reagents?

• None of the machines have ceased being used since the start of the project. Yes, the machines require cartridges and reagents which are packaged together.

Emergency settings: How do we optimize EID in emergency settings (i.e. IDPS and refugee settings where resources are limited)?

• Using POC EID and generators as a source of power is one way of addressing EID in such settings.

Cameroon: Early Infant Diagnosis Quality Improvement Collaborative

Resistance to change: Do you experience any resistance to change at the facilities?

• Not really because this was a risk that was anticipated prior to the implementation of the QI project. It was managed by buying in stakeholder/leadership implication at the designing phase of the QI Collaborative. Leadership implication easily influenced facilities to comply with changes.

Change interventions: What are the 3-5 most common change interventions identified across facilities?

1. Identification of focal person to ensure transportation and return of results weekly
2. Call caregivers to remind of the HEI 6-week appointment
3. Call caregivers who 6 week missed appointments
4. Call caregivers and send text messages to return results immediately they are available
5. Reinforce community follow-up with support of Community Health Workers to find caregivers not reachable via phone

Guideline changes: Apart from the QI processes, were there any guideline changes that might have contributed to the improvement?

• There were no guideline changes that contributed to the changes since quality improvement is still at its early stage in Cameroon. However, the achievements of the EID QIC project were
presented to MoH with advocacy to develop a country level QI strategy/guideline to improve processes in the health system in general.

**QI implementation:** How QI is implemented in Cameroon?

- QI improvement processes have just been introduced in Cameroon through the EID QIC at the moment. Currently, other QI improvement projects are rising from other implementing partners addressing other QI challenges towards achieving PEPFAR 90-90-90 goals.