

Optimizing Prevention: A Comprehensive PMTCT Program in Mombasa, Kenya

Lara Bishay

Nicholas Gavin

Maura Laverty, R.N.

Sumathi Sivapalasingam, M.D.

Aabid Ahmed, M.D.

Beatrice Wangechi, M.D.

NYU School of Medicine

Center for AIDS Research

Bomu Medicae Centre

HIV/AIDS in Kenya

- **6.1% Kenyan adults infected with HIV**
- **Rate of Infection in women twice as high as in men**
- **Vertical Transmission leading cause of Pediatric HIV**



2006 UNAIDS Global Report on HIV Prevalence

Bomu Medical Centre

- Comprehensive community health center
- Specialty clinics:
 - TB Clinic
 - Comprehensive Care Centre (CCC)
 - Maternity
 - Maternal/ Child
 - Health Clinic (MCH)



Spectrum of Care Enrollment



Healthy (+/-)



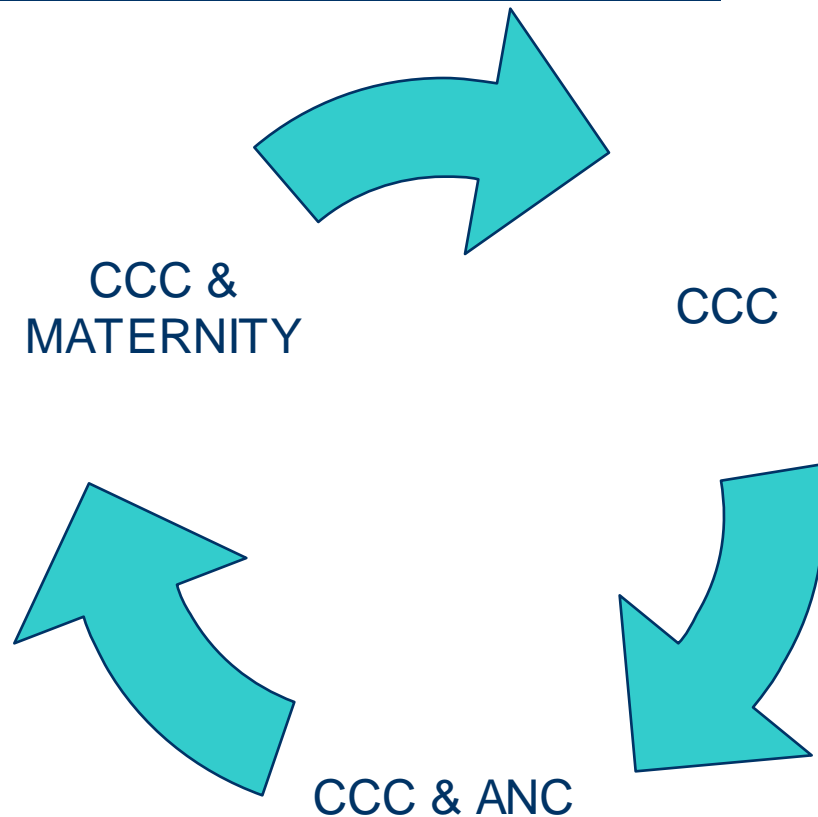
Pregnant



Post-Natal

Prevention of Mother-to-Child Transmission at Bomu

- Over 170 patients served
- 3 Entry points
- CONTINUITY OF CARE



Access to Maternity and ANC

- Transportation
- Cost of care
- Morbidity



Linkages

- MCH & CCC
- Maternity & CCC
- Tracers: Community Health Workers - The Common denominator



Exposed Infants and Pediatric Testing

- Assuring Return After Delivery
- Barriers to Pediatric Enrollment
 - Time Delay
 - Stigma & Disclosure
 - Distance from Parents
 - Perception, Education, and Support



Scaling Up

- Increasing Number of Clients
- Limits in Resources & Space
- Administration Requirements



Comprehensive PMTCT

- Continuous care
- Social support enhanced by community health workers
- Communication between departments



Implementation

- New construction of 3 new floors at Bomu
- Standard Operating Procedures Designed
 - ANC
 - Maternity
 - CCC

Moving Forward

- Lessons Learned
- Patient Feedback
- **Impact Measurement**

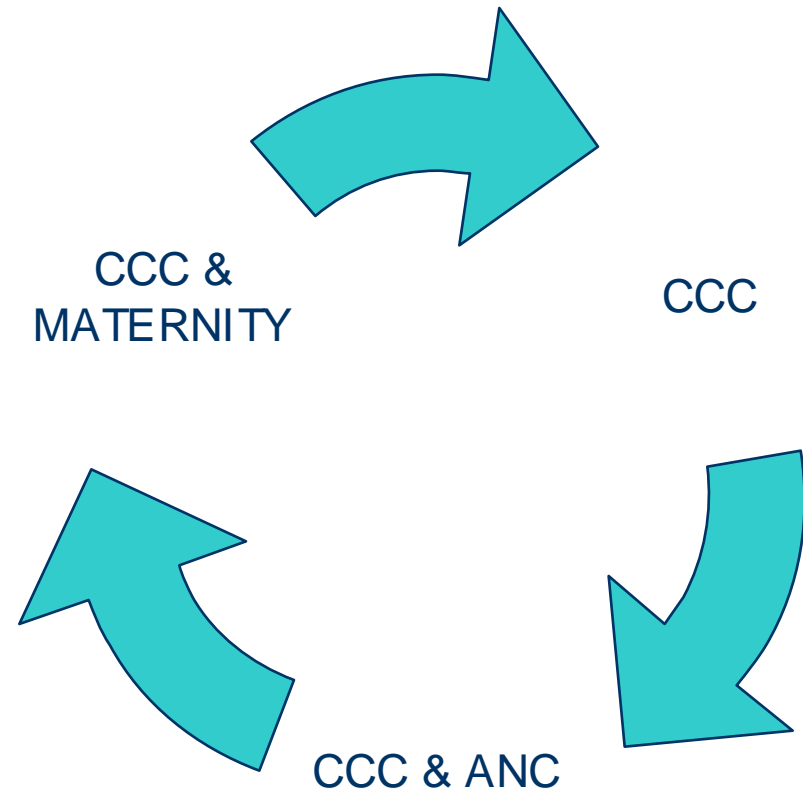


Linkages Study: Evaluating PMTCT

- *What is the effectiveness of the linkage algorithm between PMTCT and HIV programs?*
 - Determine percent of HIV-infected mothers who gave birth to uninfected infants
 - Percent of these mothers with more than 1 visit to CCC after delivery

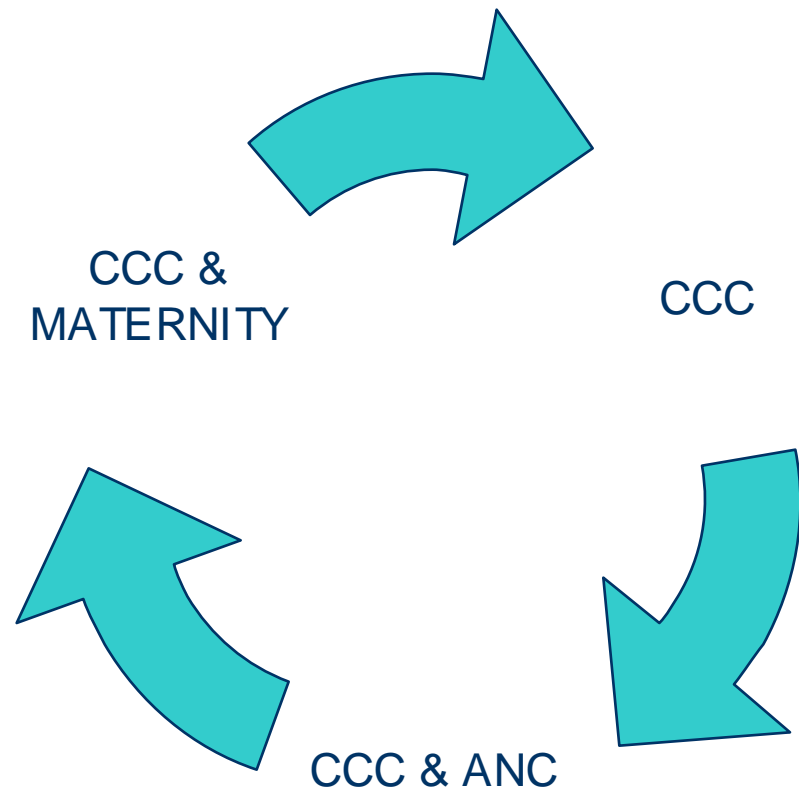
Linkage Algorithm Components

- PMTC Liaisons
- Community Health Workers



Linkage Algorithm Components

- PMTC Form
- ANC & Maternity Ward



Evaluation Method



- Baseline data from clinic registers collected into Access database
- Baseline data from April 1, 2006 – March 31, 2007
- Intervention data from April 1, 2007 – March 31, 2008

Primary Outcomes



- Percent of HIV-infected mothers attending ANC or Maternity ward with infants testing HIV DNA PCR negative at 6 weeks
- Percent of mothers receiving PMTC who make more than 1 visit to CCC after delivery

Secondary Outcomes



- % of women with unknown status offered HIV testing
- % of women who accept HIV testing
- % of HIV infected pregnant women receiving ARV for PMTC

Secondary Outcomes



- % of HIV infected pregnant women with family members tested
- % of HIV exposed infants of women receiving PMTC care who are provided PMTC medications
- % of HIV exposed infants who are HIV tested by DNA PCR at 6 weeks

Preliminary Data



- 13% prevalence rate in ANC
- 49.4% of those who test positive in ANC return for >1 post-partum visit
- 34.8% with unknown status in maternity offered testing
- 29.1% prevalence rate in maternity (of those with previously unknown status)
- 6.3% of those who test positive in maternity return for >1 post-partum visit

Conclusions



- Effective linkages between ANC/Maternity/CCC will protect more HIV exposed infants from infection
- Algorithm could be applicable for other outpatient facilities to improve PMTC coverage

Acknowledgements & Thanks

- Mentors & Advisors:
 - Sumathi Sivapalasingam, M.D.
 - Maura Lavery, RN
- Physicians and Staff at Bomu Clinic
- New York Academy of Medicine, IDSA, NYU School of Medicine IHP
- APHA

