Demand-side Barriers and Opportunities for Uptake of Pediatric HIV Testing and Care

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PMTCT, Pediatric Testing and Care Coverage

- Coverage Estimates in Low and Middle Income Countries:
  - 53% PMTCT
  - 6% Early Infant Diagnosis
  - 28% Pediatric ART

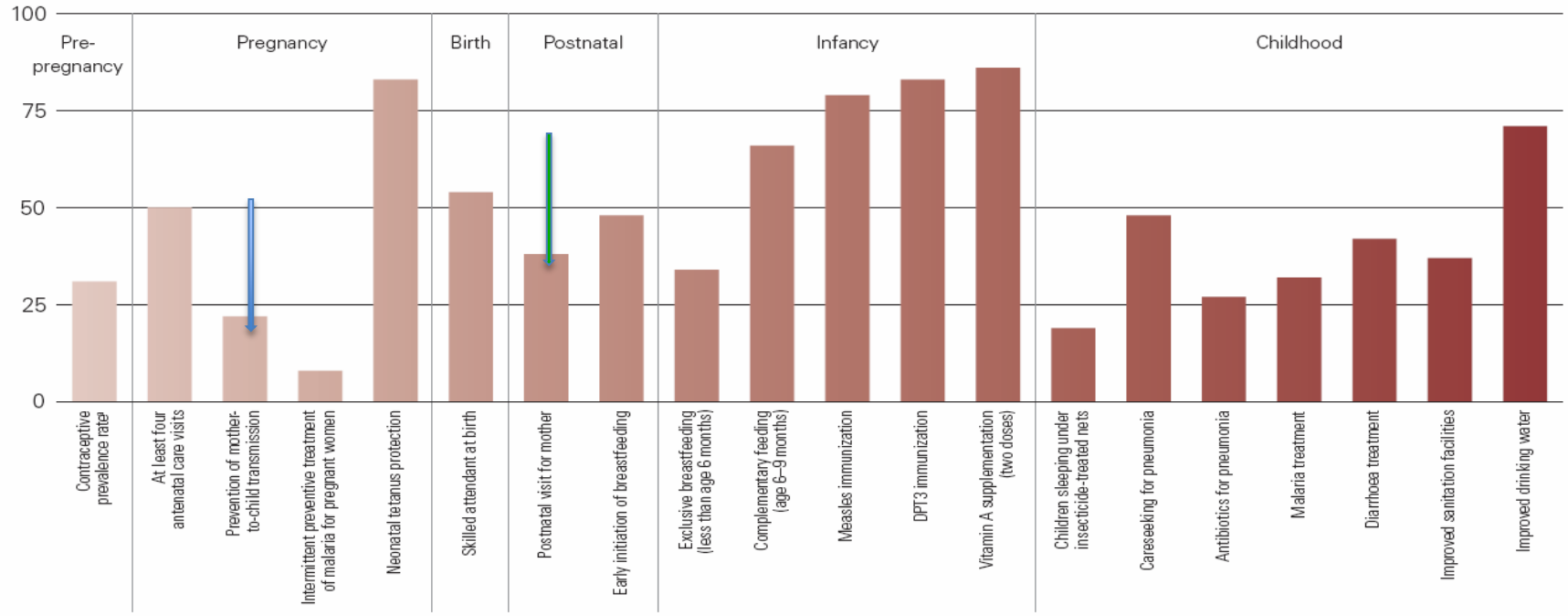
Source: Children and AIDS Fifth Stocktaking Report 2010, UNICEF

Coverage Continuum: MNCH

FIGURE 5

Coverage of interventions varies across the continuum of care

Median national coverage of interventions across the continuum of care for 20 *Countdown* interventions and approaches in *Countdown* countries, most recent year since 2000 (%)



a. Target coverage value is not 100%.

Source: Prevention of mother-to-child transmission of HIV/AIDS, UNICEF, Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO; immunization rates, WHO and UNICEF; postnatal visit for mother, Saving Newborn Lives analysis of Demographic and Health Surveys; improved water and sanitation, WHO and UNICEF Joint Monitoring Programme 2010; all other indicators, UNICEF Global Databases, November 2009, based on Demographic and Health Surveys, Multiple Indicator Cluster Surveys and other national surveys.

A Demand-Side Perspective

Demand interventions operate at the:

- individual,
- Household,
- or community level

Supply Interventions influence health service actors:

- Health personnel
- Health institutions
- Ministries of health

Ensor T, Cooper S. 2004. Overcoming barriers to health service access: influencing the demand side. Health Policy and Planning 19: 69–79. Web 2011.

Reported Obstacles to Uptake of Pediatric HIV Care in urban and rural sites in South Africa (Yeap 2010)

- Qualitative study; 6 private clinics including 3 peri-urban & one rural
- Interviewed 21 (S) Staff & 21 (C) Caregivers of HIV +-ve children
- Obstacles reported:
  - Food, transport & related treatment (Opportunistic inf.) costs (S,C)
  - Difficulty accessing welfare grants
  - Multiple caregivers, non disclosure to secondary carers (S)
  - Lack knowledge on treatment benefits (S)
  - Fear of rejection/stigma (C)
  - Labelling clinics as “HIV specific” a deterrent (S)

Reported Obstacles to Uptake of Pediatric HIV Care in urban and rural sites in S Africa (cont.)

- Client Misconceptions reported:
  - Belief that testing speeds death; ART makes people sicker (S)
  - PMTCT fully protective (S, C)
  - An HIV-+ve child must be symptomatic (S,C)
  - HIV is only sexually transmitted (S)

Rural - Predictors of EID Uptake in Mozambique (Cook 2011)

Results

- 443 Mother-Infant pairs in PMTCT
- 217 Mothers enrolled adult ART clinic
- 110 Infants (25%) received EID; median age 5mos

Predictors

- Independent means of maternal income [P <0.001]
- Larger HH size [P <0.001]
- Greater distance from facility > 10 kms [P <0.003]
- Mother on cART [P <0.003]

Rural: Reasons for PMTCT LTFU Uganda (Ahoua 2010)

- N= 567 infants born to 517 HIV positive women enrolled in PMTCT
- Final Outcomes After Tracing - 30% infants LFTU, 18% Died
- Drop out reasons:
  - Lack understanding of FU importance
  - Infant deaths
  - Stigma, lack of partner support (less reported)
- Retention reasons:
  - Occurrence of infant acute illness associated with reduced LFU (<0.0001)
  - If child isn't ill women do not perceive need for FU

Urban: Predictors for Post Natal PMTCT Adherence in Uganda

- Of 289 mothers, only 110 (38%) adhered to PN-PMTCT, significant predictors included
  - 164 Mothers aged > 25
    - Previous post natal attendance (0.018)
    - Phone access (P 0.009)
  - 125 Mothers aged ≤ 25
    - Christianity (P 0.029)

Nassali et. al, Access to HIV/AIDS care for mothers and children in sub-Saharan Africa: adherence to the postnatal PMTCT program, AIDS Care, Vol. 21, No. 9, Sept. 2009. Web 4/2011

Urban: Motivators for PN PMTCT Adherence in Kampala [FGD]

Table 3. Influences for adherence to the PN-PMTCT program.

Sphere of influence	Motivators for adherence to PN-PMTCT (from the returnees)	Hindrances to adherence to PN-PMTCT (from the non-returnees)
Benefits of postnatal PMTCT program	Child's early HIV diagnosis	Fear to learn that child is infected with HIV
	Enrollment of mother into HIV/AIDS care	Lack of clinical symptoms of HIV disease
	Interaction with counselors and peer mothers for social support	
	Previous attendance of PMTCT program yielding an HIV negative child	
	Cancer screening and birth control interventions	
Access to PN-PMTCT services	Awareness of the services offered for the mother and baby during PN-PMTCT	Transport costs to health unit
	Receiving referral information at discharge	Fear to disclose positive HIV sero-status to the partner
Social support structure	Reminder calls from clinicians	Fear of divorce or separation from spouse after disclosure of HIV-positive results
	Close contact on HAART	
	Men involvement in couple HIV testing with their spouses	

Nassali et. al, Access to HIV/AIDS care for mothers and children in sub-Saharan Africa: adherence to the postnatal PMTCT program, AIDS Care, Vol. 21, No. 9, Sept. 2009. Web 4/2011

Summary Demand-side Barriers to Uptake

- Transport, food, medical costs
- Lack of knowledge
- Misconceptions
- Fear rejection by partner and other family/friends
- Stigma

Demand-side Opportunities to Uptake

- Reduce/remove associated costs
- Mass Media
- Integration with ECD
- Mobile

Reduce/Remove associated costs (MNCH)

- CCTs to encourage in-facility delivery
  - RCT of India's Janani Suraksha Yojana significant effect on ANC & facility births nationally but poorest, least educated women did not always have highest odds of receiving payments (Lim 2010)
- Transport vouchers
  - Encourage Care for obstetric fistula by sending transport costs via cell phones (USAID 2011)
- Food supplementation
  - In rural Kenya access to a WFP feeding program noted as motivation for follow up to EID (Hassan 2011)

Mass Media

- Using Pubmed and Google Scholar (2000-2011) found 0 articles pertaining to mass media *and* promoting uptake of EID, Pediatric HIV care
- Comminit (website) – 1 study - women who spontaneously named a PMTCT character in radio drama as favorite character nearly twice as likely to test for HIV during pregnancy as those who did not (Kuhlmann 2008)
- Role to improve knowledge and reduce misconceptions…but which messages reasonate? Which media most likely to reach rural poor?

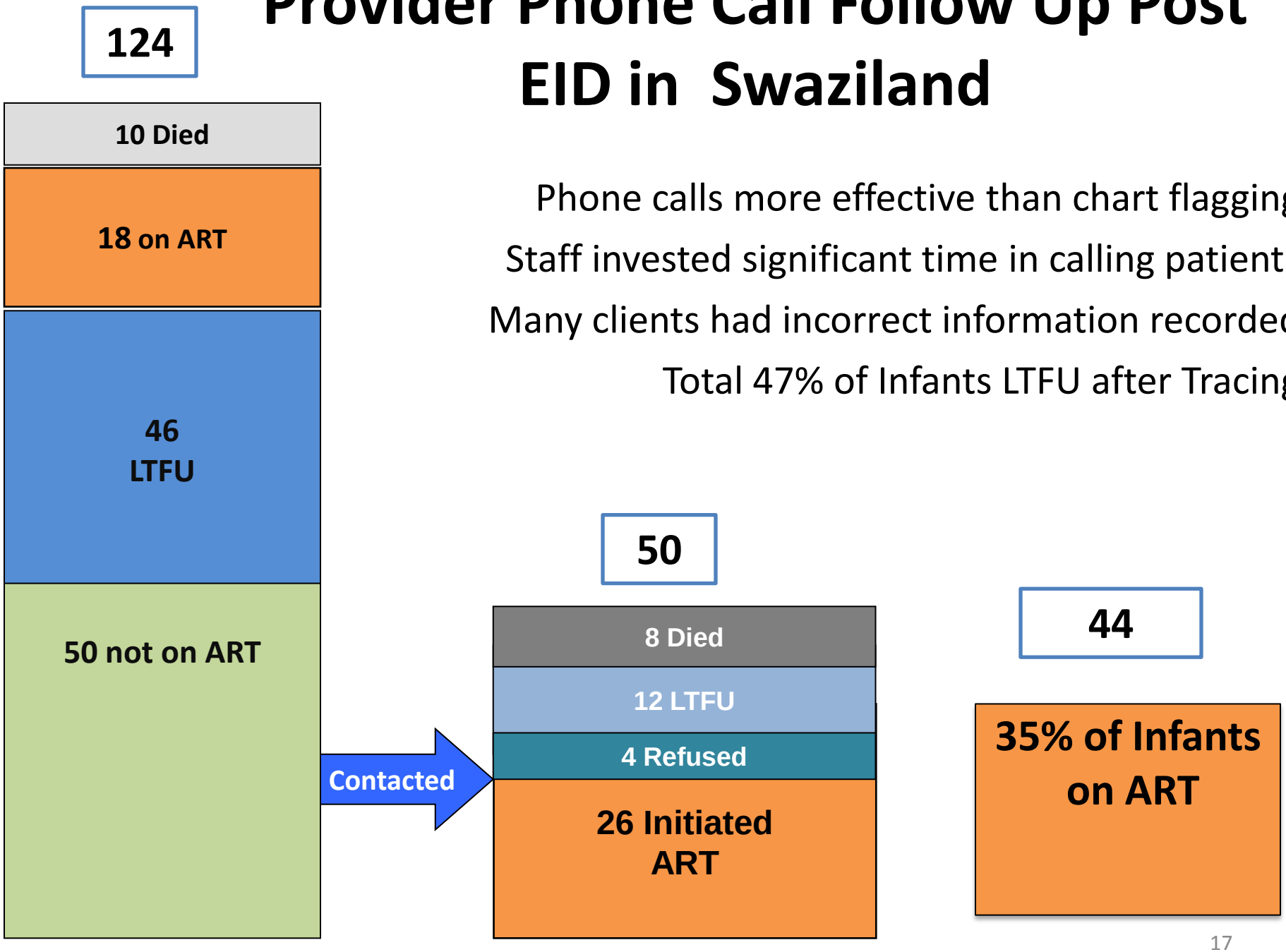
Integration with Early Child Development

- Longer time horizon (age 0-7) – bridges health to school gap
- Socially integrated (not HIV exclusive)
- Holistic focus on cognitive, physical and emotional development
- Emphasis on positive parenting, hygiene and nutritional education and support
- Opportunity for early detection of health and broader developmental problems
- Opportunity for adherence support
- Day care/respite care for working mothers; elderly carers
- Can be provided with other interventions such as microsavings (Care Intl. Kenya)

Mobile

- SMS Adherence messages
  - Adults receiving SMS messages had improved ART adherence & viral suppression rates compared to control group in Kenya (Lester 2010)
    - Adherence (relative risk [RR] for non-adherence 0·81, 95% CI; p=0·006)
    - VL (RR for virologic failure 0·84, 95% CI; p=0·04)
- “Please Call Me” to encourage TB & HIV testing
  - In pilot phase resulted in tripled calls to Natl AIDS Hotline in RSA (Leach Lemens 2009)

Provider Phone Call Follow Up Post EID in Swaziland



Phone calls more effective than chart flagging

Staff invested significant time in calling patients

Many clients had incorrect information recorded

Total 47% of Infants LTFU after Tracing

Elizabeth Glazer Pediatrics AIDS Foundation Swaziland 2008

Women & Mobile Phone Access (GSMA 2010)

- Ownership twice as likely among urban women vs. rural; in Africa female ownership is 23% less likely than male
- Mobile Phone Use Among Women at "Bottom of Pyramid" (HH income >$75 monthly; aged 14-74; rural and urban)
  - 26% own a phone and of these 54% pay for their own service
  - "Over half" borrow others phones usually family member
- Women who borrow a phone
  - Don't have privacy
  - Use less and may miss important messages and texts

Summary Demand-side Opportunities

- **Reduce/remove associated costs** - Evidence exists for CCT…less for other such as transport vouchers, food supplements
- **Mass Media** – few (no?) good studies demonstrating influence in regard to uptake of pediatric HIV testing and care; need formative research - which messages reasonate with women and their partners?
- **Integration with ECD** – need to better understand demand - what array of services work?
- **Mobile** – promising but coverage across rural poor women presents big challenges needs to considerably improve

Thank You

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