Strengthening the health system
Saving babies,
Saving mothers

Jennifer Reddy
Overview

• Global targets
• Health system strengthening- closing the dap
• KZN recipe for success
• Updates
• Recommendations
COUNTDOWN TO ZERO

• Believe it, do it
• UNAIDS 2011
2 goals – by 2015

• Reduce # of new child HIV infections by 90%
• Reduce the number of AIDS-related maternal deaths by 50%

Reduce MTCT to less than 2% - 6 weeks, 5% at 18 months
Reaching goals - MDG 4.. And 5

Under-five mortality rate
Deaths per 1000 live births

SOUTH AFRICA

BOTSWANA

Causes of under-five deaths, 2008
Globally more than one third of child deaths are attributable to undernutrition

Source: IGME 2009

Source: UNICEF 2009

Source: WHO/UNICEF 2010

Source: WHO/UNICEF 2010
What is the problem?

“4 million women, newborns and children in sub-Saharan Africa could be saved every year if well-established, currently available, affordable health care interventions could be implemented across the region”

African Academies of Science, Accra, December 2009
“Real Life” issues: PMTCT programme

Access issues

- Attend ANC clinic
- Attend facility based delivery
- Attend postnatal care

PMTCT Program delivery issues

- Counseled and tested for HIV, CD4
  - CD4 result
  - Referred for HAART
  - Started on AZT
- Referred for HAART
- Start on HAART
- AZT/sdNVP in labour
- Start IF and infant ARVs
- Postnatal IF counseling, HIV care tracking and testing
- Manage mother-child pairs in high HIV burden countries
What wins?

Risk factors

Effective interventions

Health system issues

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What will it take to close the “gap”?

Necessary Ingredients for functional health system – South Africa...

✓ Leadership/Governance. Activated leadership
✓ Delivery systems accessed by population
✓ Funding: $748 per capita, 8.7% of GDP
✓ Drugs/Labs: Widespread availability of ART
✓ Trained Workforce: 4.9 care givers / 1000 (WHO min 2.5)
✓ District Information system: DHIS, PMTCT Core Indicators
Gap between clinical trial and “real life” PMTCT implementation

Horwood 2010
The KZN success story - possible causes

- DOH leadership
- Evidence based guidelines
- Partnerships and co-ordination
- Health system strengthening
  - Health information
  - Communication, referrals
  - Service delivery improvement
  - Teams
  - Testing changes - scaling up

(Rollins N. AIDS 21: 1341–1347 2007
Horwood C WHO bulletin 2012
Goga A- SAPMTCTE study group 2012)
Infant and child survival is dependent on the survival and health of mothers

IMR for infants of HIV+ mothers

Ref: IHMA working group Lancet 2004
What are the elements we need for quality?

- **Structure** (buildings, equipment, drugs)
- **Technical** (knowledge, training, protocols)
- **Functional Systems** (ability to deliver services)
How did we reach our targets?

Building Will

Methods for Systems Improvement

Executing and spreading change
What is the Quality “Gap”

Medical Knowledge

What we know

Yesterday

Today

Tomorrow
What is the Quality “Gap”

Medical Knowledge

What we know

What we do

Yesterday
Today
Tomorrow
What is the Quality “Gap”

What we know

Medical Knowledge

Yesterday

Today

Tomorrow

How does QI help?
1. Leadership

• Set the pace
• Visible
• Evidence based guidelines
2. System: simplify care processes and data system

1. Proportion of ANC clients tested for HIV
2. Proportion of HIV+ clients with CD4 test
3. Proportion of HIV+ clients started on HAART
4. Proportion of HIV+ clients started on AZT
5. Proportion of HIV+ mother and infants get NVP
6. Proportion of mothers counseled on feeding
7. Proportion of HIV exposed infants get PCR test
2. System: Reliable Data Feedback Systems

Facility Improvement Teams work at clinic sites review own data

PMTCT data collected at clinics and hospitals

Improve PMTCT processes and outcomes

Review PMTCT data at District level - use data for planning and to assist facilities to improve
The dashboard
Changing the culture

The transition..
1. Akusiyo yethu (that is not mine)
2. The data is wrong – I will send you the right data
3. Hhayibo! Eyami! (gosh! That is my data)
4. Asilungise – we see a problem and will get back to you with a solution
Peer to peer learning
HIV Testing: ALL THREE Districts

All three districts HIV Counseling and Testing

All HIV Testing Rate
Including and testing local ideas

The “Gap”

GREAT IDEAS

SYSTEM ANALYSIS

GREAT IDEAS

SMALL TEST CYCLES THAT TAP LOCAL KNOWLEDGE

PLAN

ACT

STUDY

IMPLEMENT

SUCCEED/SUSTAIN

Institute for Healthcare Improvement
Accelerating access to ART

KZN - Clients eligible and Initiated on HAART
2 year experience

QI project
PMTCT co ordinator
dashboard

Antenatal client initiated on HAART
Antenatal client eligible for HAART
What wins?

Risk factors

Effective interventions

Health system issues

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Comparison of Options A, B and B+

Table 1. Three options for PMTCT programmes

<table>
<thead>
<tr>
<th>Woman receives:</th>
<th>Treatment (for CD4 count ≤350 cells/mm³)</th>
<th>Prophylaxis (for CD4 count &gt;350 cells/mm³)</th>
<th>Infant receives:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option A</strong></td>
<td>Triple ARVs starting as soon as diagnosed, continued for life</td>
<td>Antepartum: AZT starting as early as 14 weeks gestation</td>
<td>Daily NVP from birth through 1 week beyond complete cessation of breastfeeding; or, if not breastfeeding or if mother is on treatment, through age 4–6 weeks</td>
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<tr>
<td></td>
<td></td>
<td>Intrapartum: at onset of labour, sdNVP and first dose of AZT/3TC</td>
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<td>Postpartum: daily AZT/3TC through 7 days postpartum</td>
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<tr>
<td><strong>Option B</strong></td>
<td>Same initial ARVs for both‡</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Triple ARVs starting as soon as diagnosed, continued for life</td>
<td>Triple ARVs starting as early as 14 weeks gestation and continued intrapartum and through childbirth if not breastfeeding or until 1 week after cessation of all breastfeeding</td>
<td></td>
</tr>
<tr>
<td><strong>Option B+</strong></td>
<td>Same for treatment and prophylaxis‡</td>
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</tr>
<tr>
<td></td>
<td>Regardless of CD4 count, triple ARVs starting as soon as diagnosed, continued for life</td>
<td>Daily NVP or AZT from birth through age 4–6 weeks regardless of infant feeding method</td>
<td></td>
</tr>
</tbody>
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World Health Organization
Major Changes in Context

• Global Plan and bold EMTCT targets
• New evidence for ARV treatment as prevention (TasP)
• Increasing country experience with operational and programme challenges with both Options A and B, and challenges linking PMTCT and ART
• Proposal by some countries (eg. Malawi) to move to "Option B+")
• Simplify and optimize ARV regimens and service delivery
• Decreasing cost of ARV drugs
How does a mother decide whether or not to attend for care and how she feeds her child?

• If she considers that health services serve her interests and those of her child
• If benefits of attendance are not prejudiced by the way she is received by health staff
• If the sentiments of families and communities are favourable towards the health services
Recommendations

- Reliable service delivery
- Community as part of our health system
- Patient-centred care
Acknowledgements

• Leadership – at all levels of care
• DOH staff
• All partners
• 20,000+ team
• IHI