

**UNITE FOR CHILDREN**  
**UNITE AGAINST AIDS**



## A Call to Action

# Children – The missing face of AIDS



Aids-United Nations Programme 072002  
**UNAIDS**  
UNEP-UNICEF-WFP-UNAIDS  
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unicef 

# Scaling up Paediatric HIV Care Treatment in resource limited settings

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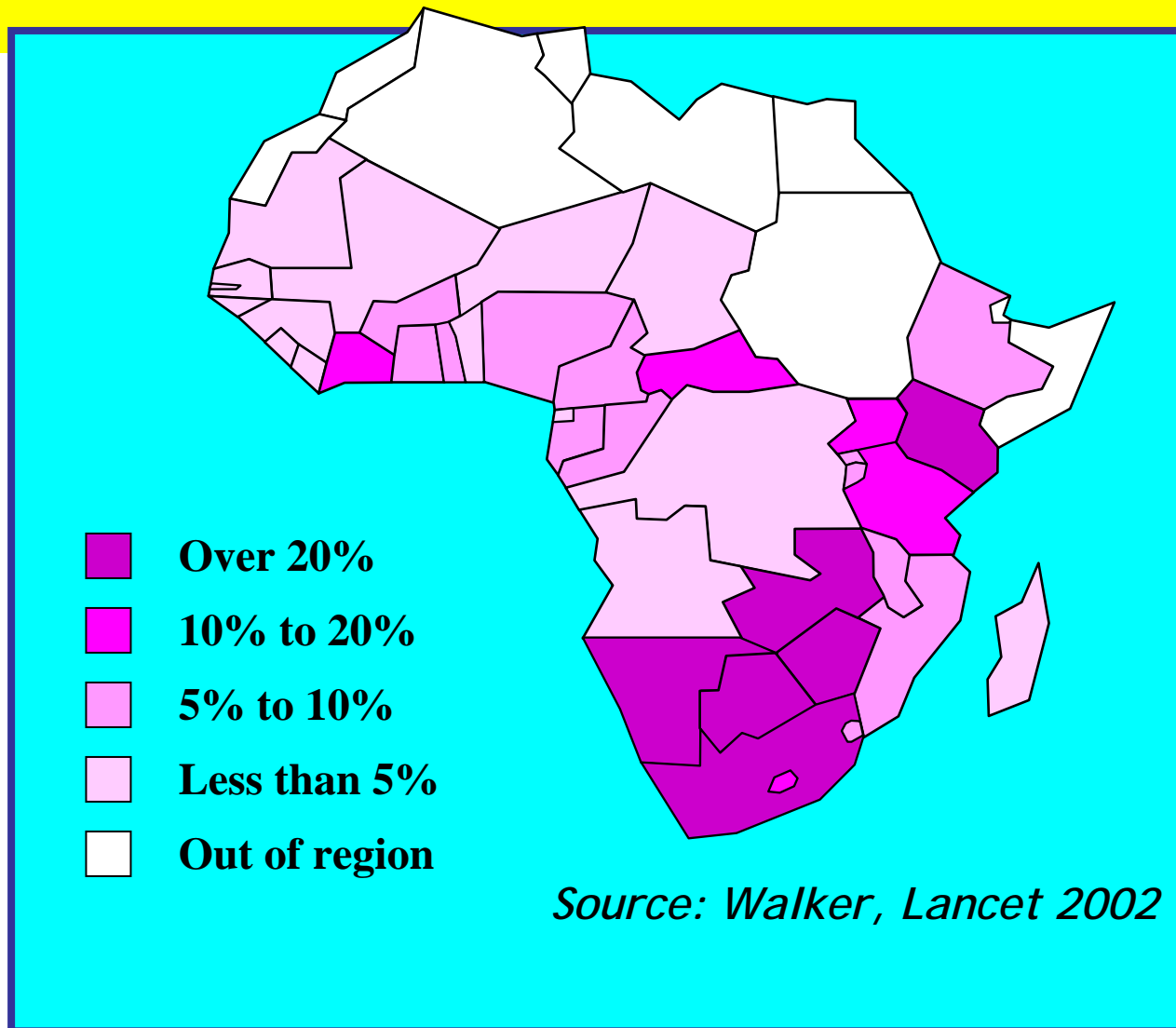
# Presentation overview

1. What do we know?
2. Programming environment and opportunities
3. Three Care Continuums for a comprehensive approach to Paediatric Care
  - a) Accelerating PMTCT scale up
  - b) Institutionalising care of children exposed to maternal HIV infection
  - c) Providing care and treatment to children known to be HIV infected

# HIV Disease Burden

- Over 90% of children acquire infection from their mothers
- Of the 135 million women giving birth annually, 2.0 million are HIV infected
- Up to 35- 40% of HIV+ mothers transmit HIV to their babies; Proven PMTCT interventions can reduce this risk to < 5%
- Only 8% of HIV+ pregnant women in resource limited settings are currently receiving ARVs for PMTCT (UNICEF, 2005)
- In 2005 alone:
  - 640,000 children were newly infected
  - 510,000 children died of HIV

# Contribution of HIV to child mortality



# Cumulative mortality rate in HIV infected children – ML Newell 2005

Month	Mortality
1	0.009
2	0.033
3	0.071
4	0.128
5	0.173
6	0.210
7	0.240
8	0.259
9	0.294
10	0.328
11	0.340

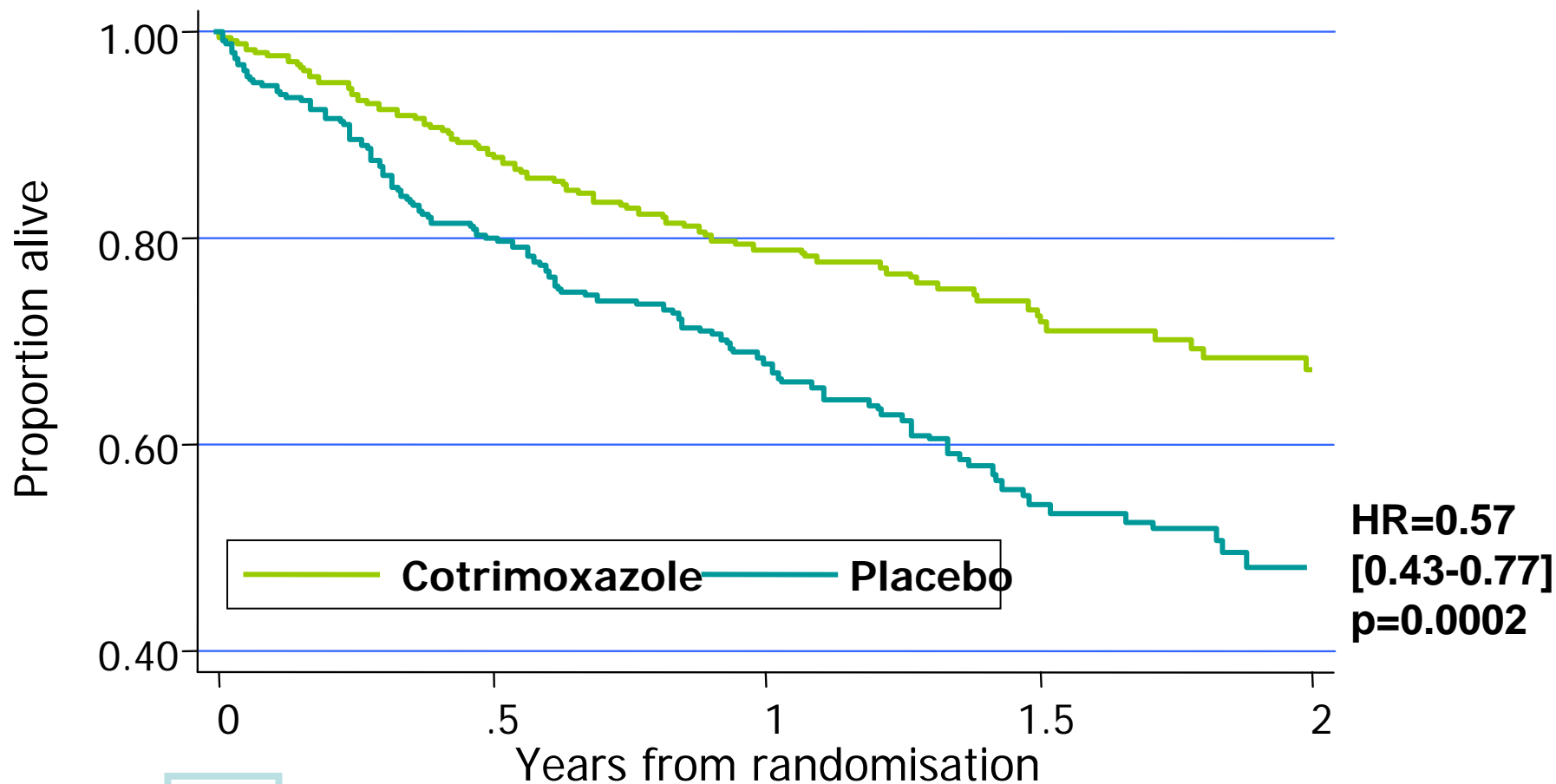
Year	Mortality
1	0.368
2	0.517
3	0.565
4	0.585
5	0.600
6	0.636
7	0.669
8	0.699
9	0.726
10	0.750

# What can be drawn from existing evidence when no treatment currently available? ML Newell, 2005

Year	HIV-attributable mortality	Mortality in MSD cases	MSD progression rate
1	0.32	0.89	0.36
2	0.45	0.72	0.54
3	0.49	0.58	0.61
4	0.51	0.40	0.65
5	0.52	0.40	0.69
6	0.55	0.54	0.75
7	0.58	0.53	0.80
8	0.61	0.52	0.86
9	0.64	0.50	0.91
10	0.66	0.49	0.95

# Children respond well to care: 43% Decrease in mortality with cotrimoxazole

Chintu C et al. *Lancet* 2004;364:1865-71



Cotox  
Placebo

265  
269

232  
211

177  
143

106  
72

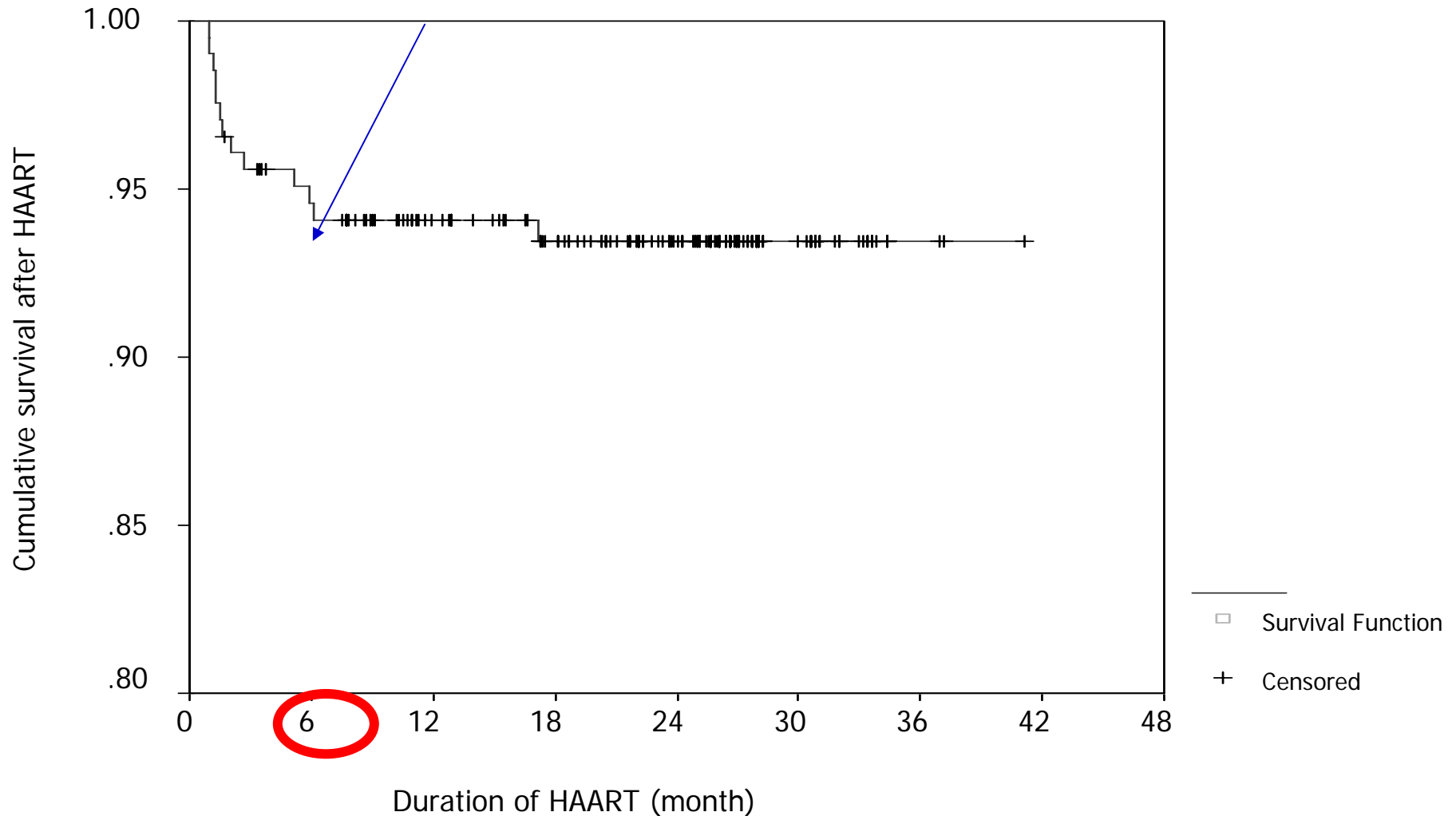
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# The survival curve of HIV-infected children receiving HAART between 2002 and 2005 in Thailand (Thanyawee Puthanakit, Kobe 2005)



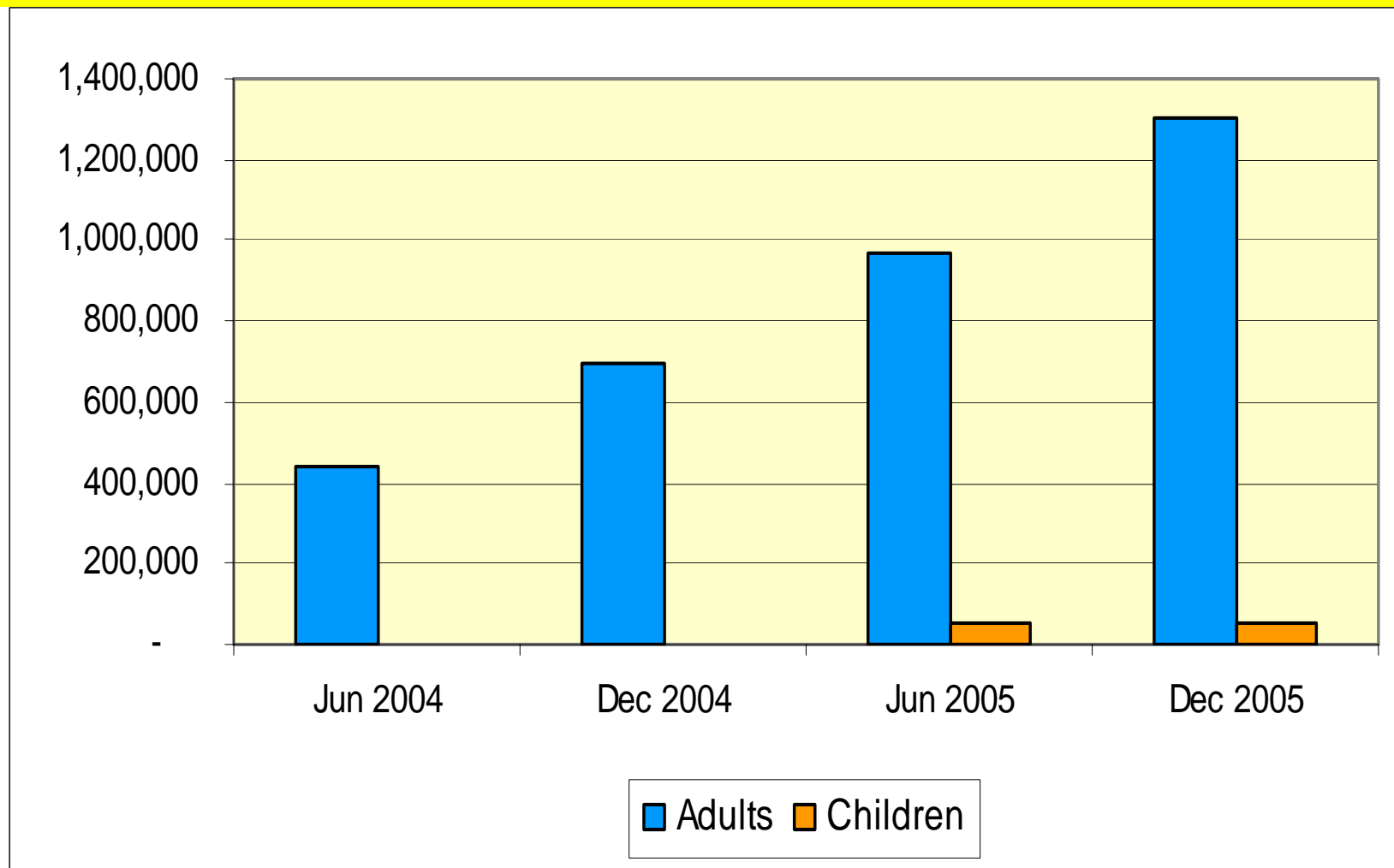
# Estimates of children in need of ARV treatment and cotrimoxazole in 2005

(UNAIDS/UNICEF 2005; Boerma et al, WHO Bulletin 2006)

2005 estimates	Child (0-14 years) deaths due to AIDS	Children (0-14 years) in need of ART	Children (0-18 months) in need of ART	Children (0-14 years) in need of cotrimoxazole - diagnosis at 18 months	Children (0-14 years) in need of cotrimoxazole - diagnosis before 18 months
<b>Global</b>	<b>410,000</b>	<b>660,000</b>	<b>270,000</b>	<b>4,000,000</b>	<b>2,100,000</b>
Caribbean	3,100	5,100	1,800	29,000	15,000
East Asia	1,500	1,900	1,700	17,000	7,600
Eastern Europe & Central Asia	1,100	1,600	1,100	18,000	6,200
Latin America	6,000	8,600	400	70,000	35,000 <sup>b</sup>
North Africa & Middle East	5,300	7,600	4,400	59,000	18,000
Oceania	<500	<500	<500	2,000	<1000
South & South East Asia	26,000	37,000	21,000	290,000	130,000
<b>Sub-Saharan Africa</b>	<b>370,000</b>	<b>600,000</b>	<b>240,000</b>	<b>3,500,000</b>	<b>1,900,000</b>
Asia	28,000	39000	23000	310,000	140,000
Latin America & Caribbean	9,200	14,000	5,800	100,000	50,000

# The Reality

## ARV Treatment Access in children

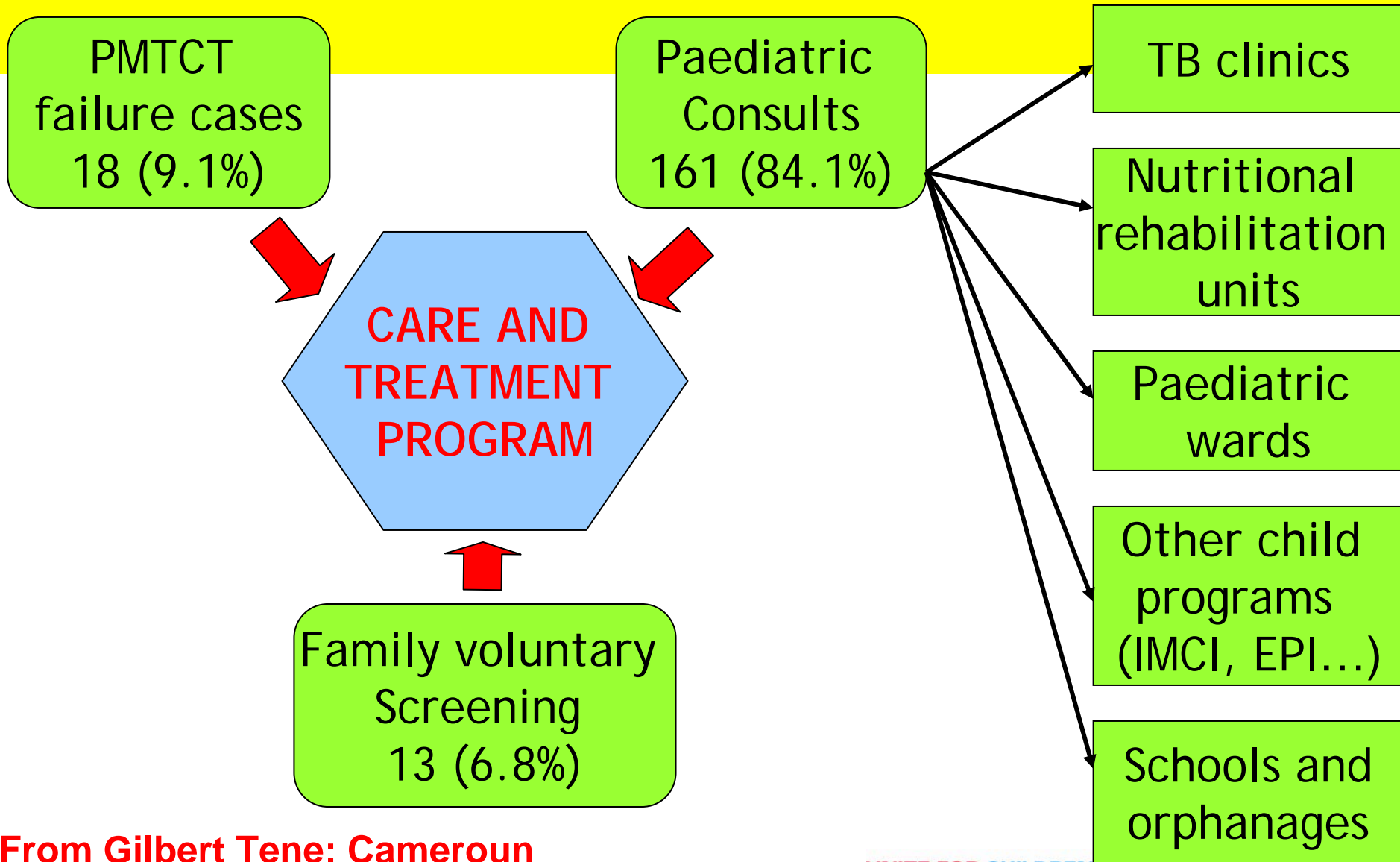


# Programming environment and opportunities

## Diagnosis of HIV

- Antibody based testing facilities widely distributed but not adequately integrated in child care facilities
- HIV diagnosis in children below 18 months has been problematic:
  - Poor follow up of babies identified as exposed through PMTCT
  - PCR although expensive and requiring sophisticated laboratory / expertise becoming more available
  - Positive evidence and experiences with use of dry filter blood spots for transporting specimens for PCR
  - Can use presumptive diagnosis in exposed infants for initiating therapy where PCR not available (WHO)

# Entry points into ART for children and respective contribution at the MCC/CBF



From Gilbert Tene; Cameroun

# Programming Environment and Opportunities:

## Staging of disease

- Clinical and laboratory staging of HIV disease for entry into ARV treatment
  - WHO recommendations available for country level adaptation (eg India, Malawi, Zambia)
  - CD4 cell count capacity becoming increasingly available due to ART roll out
  - CD4% better for children < 6 yrs but this technology capacity is still limited in most countries
  - Clinical staging alone will miss out some of the children needing treatment

# Programming Environment

## Key Program Components

- Development paediatric HIV management and coordination capacity at central and sub-national level to guide and harmonise implementation .
- Setting treatment of targets to drive the national response and ensure accountability (3x5 initiative)
- Development of provider competencies in provision of care and treatment essential to scale up (Thailand, Rwanda)
- Supply forecasting, procurement and management
- Monitoring and evaluation/quality assurance system

# Three Continuums of Care for a comprehensive Paediatric Care Treatment Response

1. A continuum that spans from pregnancy:
  - Accelerating access to prevention of mother to child transmission of HIV services
2. A continuum of care of children exposed to maternal HIV infection:
  - Systematic follow up care of children exposed to maternal HIV through strengthened child care services
3. A continuum of care and treatment of children identified as HIV infected:
  - Provision of ART and other support services to eligible children

*Requires a team approach to care*

# Accelerating PMTCT Scale up: Moving from pilot to implementation at scale

1. Human Resources Strengthening essential (eg Botswana, Kenya, Uganda, Thailand, Zambia):
  - Strong national team / Designated district coordinators
  - Capacity development (targeted training staff involved in the program)
  - Involvement of non-medical providers in care provision (e.g. lay counsellor program in Botswana)
2. Decentralisation of management structure; systems and training to regional, provincial, state and/ district level (eg Zambia, Cameroon, Malawi, South Africa):

# Accelerating PMTCT Scale up: Moving from pilot to implementation at scale

3. Institutionalisation of provider-initiated routine offer of HIV testing
  - Routine offer of TC as a standard part of the package of MCH services is a key factor for increasing the uptake
4. Effective use of monitoring data to guide expansion (Cameroon, Kenya, Botswana and Thailand)
5. Linkage of PMTCT to HIV CST essential to improve uptake and effectiveness:
  - Family care model (MTCT-Plus, Rwanda)

# Institutionalising Care of Children Exposed to Maternal HIV Infection

- Transfer of maternal HIV status onto child's road to health card to ensure care continuum (eg Zimbabwe)
- Preparation of follow up facilities to manage:
  - Systematic follow up of exposed children within existing services such as EPI (South Africa, Botswana, Rwanda)
  - Provision of a package of services at each visit (growth monitoring, feeding counseling, cotrimoxazole, immunisation, adherence counseling)
  - Institutionalisation of early HIV diagnosis using either Ab testing or PCR whichever is available (South Africa, Botswana, Rwanda)
  - Structured Referral of children for ART

# Care and treatment of children known to be HIV infected

- Optimise identification of HIV infected children by screening at multiple high yield entry points (Cameroun)
- For high prevalence countries, consider instituting routine offer of HIV testing in children at high yield service sites (Zambia)
- Define how services will be provided within a chronic care model eg:
  - Follow up structure and package of services to be provided
  - Consider nurse driven pre-ART care at primary level; doctor driven initiation of ARV treatment; nurse or community driven follow up care and treatment
- Establish referral linkages and management structures

# Conclusion: With commitment and adequate financing we can save children

## Inputs

Programme Management  
Target setting and planning

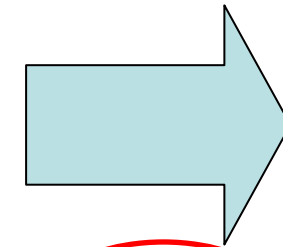
Resource development  
(Investing in people,  
infrastructure, systems  
and supplies)

Service delivery  
(provision of  
health services)

Financing  
(Resource mobilisation  
and budget allocation)

## Outputs

Quality  
care



Good  
programme  
coverage

## Outcomes

Good follow up  
care and  
adherence

## Impact

Improved  
Health of  
children