Beyond the public sector: Lessons learned through early ACT deployment in Zambia

Pascalina Chanda, Operations Research Officer, National Malaria Control Center, Zambia

American Society of Tropical Medicine and Hygiene Annual Conference

Philadelphia, 5th November, 2007





Background – malaria in Zambia

- Leading cause of illness and deaths
- Predominant parasite: P. falciparum
- Vectors: An. gambiae and An. funestus complex
- 4 million clinical cases per year
- 6,500 deaths (HMIS 2006)
- In-hospital CFR: 49/1000 admissions



Priority malaria interventions

- Case management
 - with ACTs (Coartem©) as first line treatment
 - improvements in diagnostic services using microscopy and RDTs
- Prevention
 - Insecticide-treated mosquito nets (now LLINs)
 - Indoor residual spraying (IRS) in 15 mainly urban districts
 - Prevention of malaria in pregnancy, including IPT(SP) and ITNs



Health System Context

- Ministry of Health HQ
 - National Malaria Control Center: MOH + many partners
- Decentralized system
 - Provincial Health offices (9)
 - District health management teams (72)
- Health facilities, NHCs, CHWs
- Drugs centrally procured, free in public health facilities
- Autonomous pharmaceutical regulatory authority
- Distribution subcontracted to Medical Services Ltd

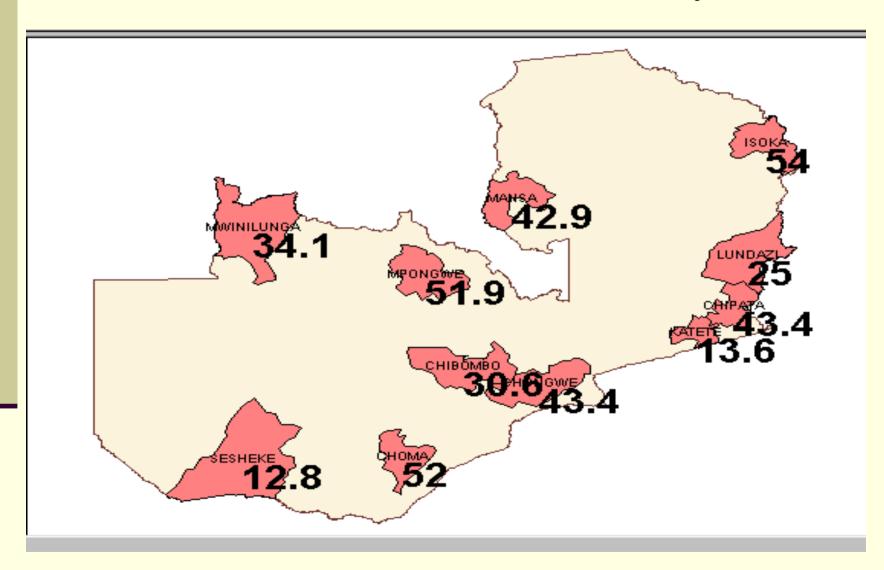


Historical Context

- Chloroquine first line for more than 40 yrs
- SP adopted as second line
- Quinine for severe and complicated disease
- CQ treatment failures rose from 0% (1980) to 50% (2002)
- Malaria incidence increased ~3-fold (HMIS)

Treatment Failure Rates (%) to CQ by 2003







Policy Change Process

- Consultative process
- Review of available evidence
- Stakeholder management
- Review of global position on malaria treatment policy in SSA
- Review goals on the NHSP
- Policy adoption and dissemination
- Develop implementation plan for roll out



Policy Statement

- Uncomplicated malaria: Artemether-lumfantrine
- Severe malaria : Quinine
- Children <5kgs: Sulphadoxine-Pyrimethamine (SP)</p>
- Malaria in pregnancy
 - Quinine 1st trimester
 - SP 2nd and 3rd trimester of pregnancy and for IPT



Policy Implementation

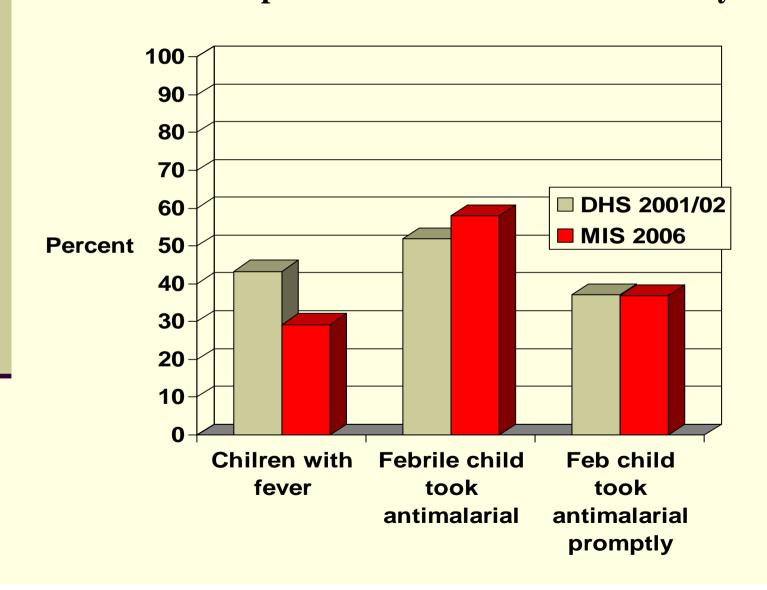
- Phased approach:
 - Started in 7 pilot districts (Feb 2003)
 - Scaled up to 28 districts (Nov 2003)
 - Further scaled up to all 72 districts (Nov 2004)
- CQ use was discontinued in all health facilities
- Used SP in the interim



Essential Actions

- Procurement, supply and distribution systems developed
- Front line health worker orientation on treatment guidelines
- Extensive IEC for patients and providers
- Drug efficacy monitoring
- Pharmacovigilance (incl. pregnancy registry)
- Compliance monitoring

Comparisons: Children with fever and taking antimalarials DHS 2001/02 compared to Malaria Indicator Survey 2006





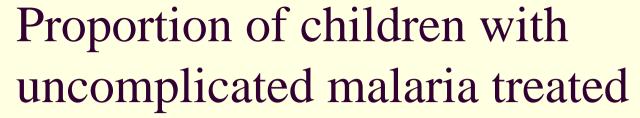
Progress in support systems

	2004	2006
A-L wall charts	20%	75%
Availability of treatment guidelines	58%	92%
Inservice training on A-L	25%	41%
RDTs	0%	63%



Progress in support systems

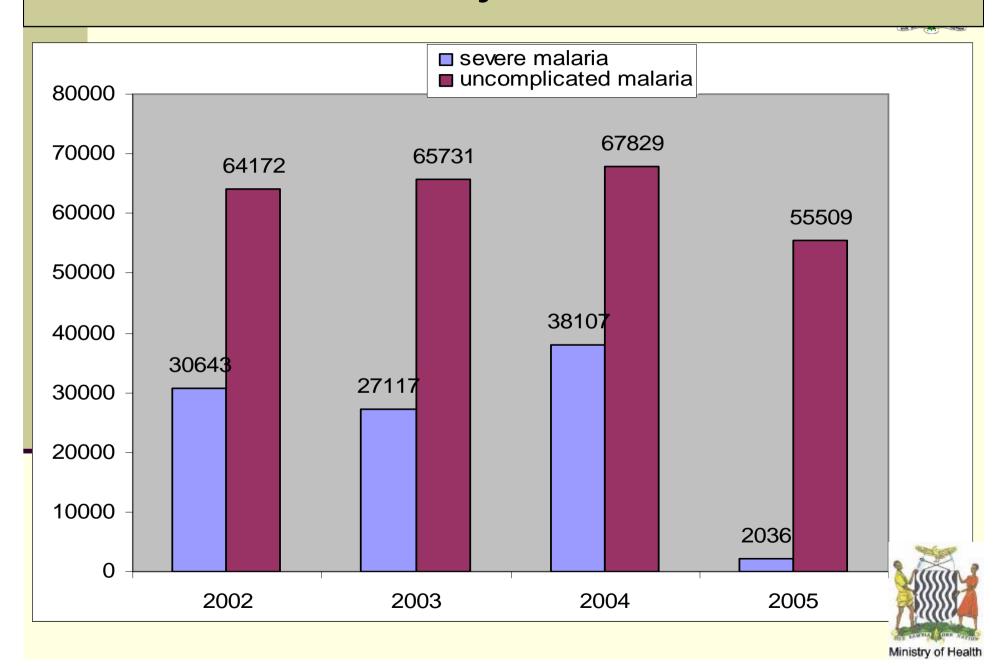
	2004	2006
Microscopy	17.0%	17.3%
Availability of AL	51%	60%
Availability of SP	100%	92.3%
Quinine	75%	80%
Chloroquine	75.5%	0%





Characteristics	2004	2006
AL	10.7%	42.2%
SP	67.5%	27.6%
Quinine	4.8%	7.0%
5-9kg with AL	1.1%	27%
Chloroquine	0%	0%

Trends in Malaria Morbidity at Selected Health Facilities





Achievements

- ACTs rolled out to all government and mission health facilities for FREE
- Improved health worker readiness to deliver ACTs
- Increase in number of children treated with ACTs
- Ongoing efficacy, safety and compliance monitoring
- Cost-effectiveness analysis completed
- Improved diagnostic capacity
- Pregnancy registry on going



Lessons Learned

- Policy change is only the start of a lengthy process to introduce and implement the new policy
 - High level involvement needed at various stages of the policy change process
 - Evidence base for policy decision making is required
 - Implementing malarial drug policy change is costly
 - Phased approach was key to the success
- Effectiveness = efficacy + coverage + compliance



Lessons Learned

■ The two misses:

- Home management of malaria
- Private sector engagement
- Harnessing the partnerships
- Training of frontline health workers in the revised treatment guidelines
- IEC needs were underestimated
- Improved diagnostic capacity is critical
- Implementing a dual/phased policy change is challenging



Way forward

- Improving drug logistics management at all levels
- Implementing the private sector component
- Deployment of ACTs with diagnostics including RDTs for home management of malaria
- Improving management of severe malaria



Conclusion

- Zambia has a strong public sector and case management improvements through these existing systems is now advancing and being prioritized
- Improving access to prompt and effective case management cannot be achieved by the public sector alone
 - Other service providers need to be brought on board : Private & community



Thank you