



Effectiveness of antenatal clinics to deliver IPTp-SP in ANC

Jenny Hill and Jayne Webster

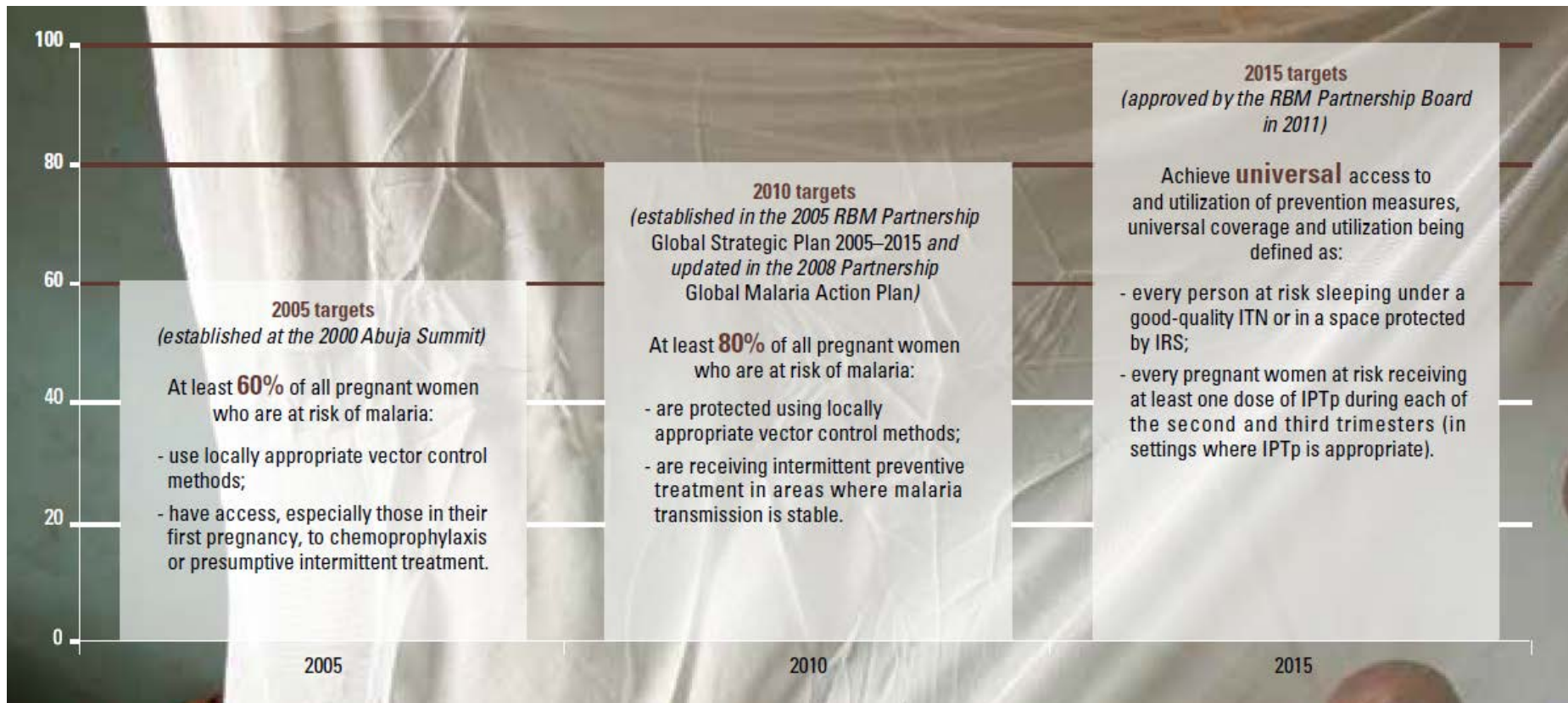


BILL & MELINDA
GATES *foundation*

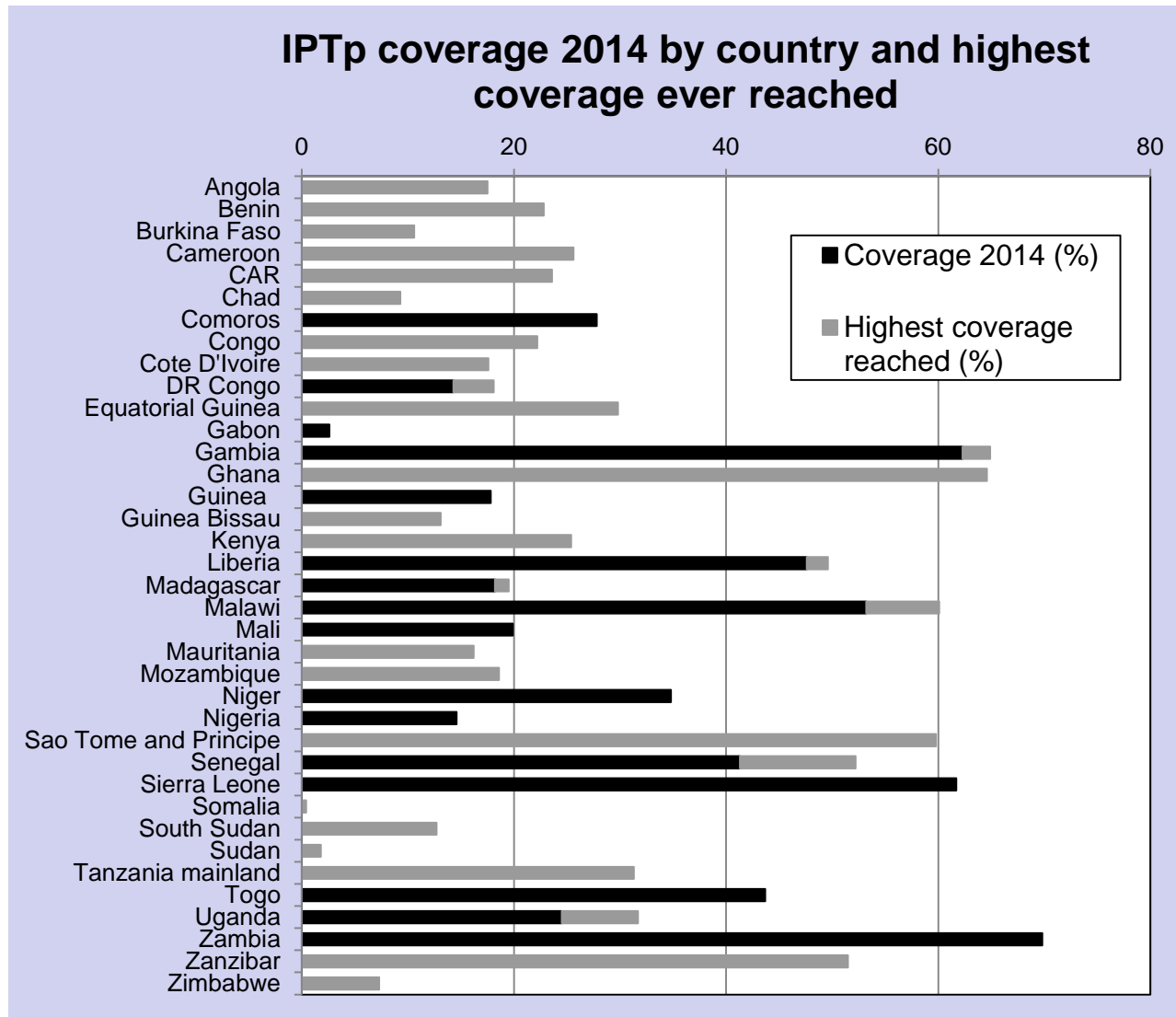
Overview

- Coverage
 - Where are we now
- Identifying the bottlenecks in delivery and uptake
 - Studies in Kenya and Mali
 - Systematic review of literature
- Using routine HMIS data to identify bottlenecks
 - Studies in Kenya and Mali
 - Protocol??
- Discussion points

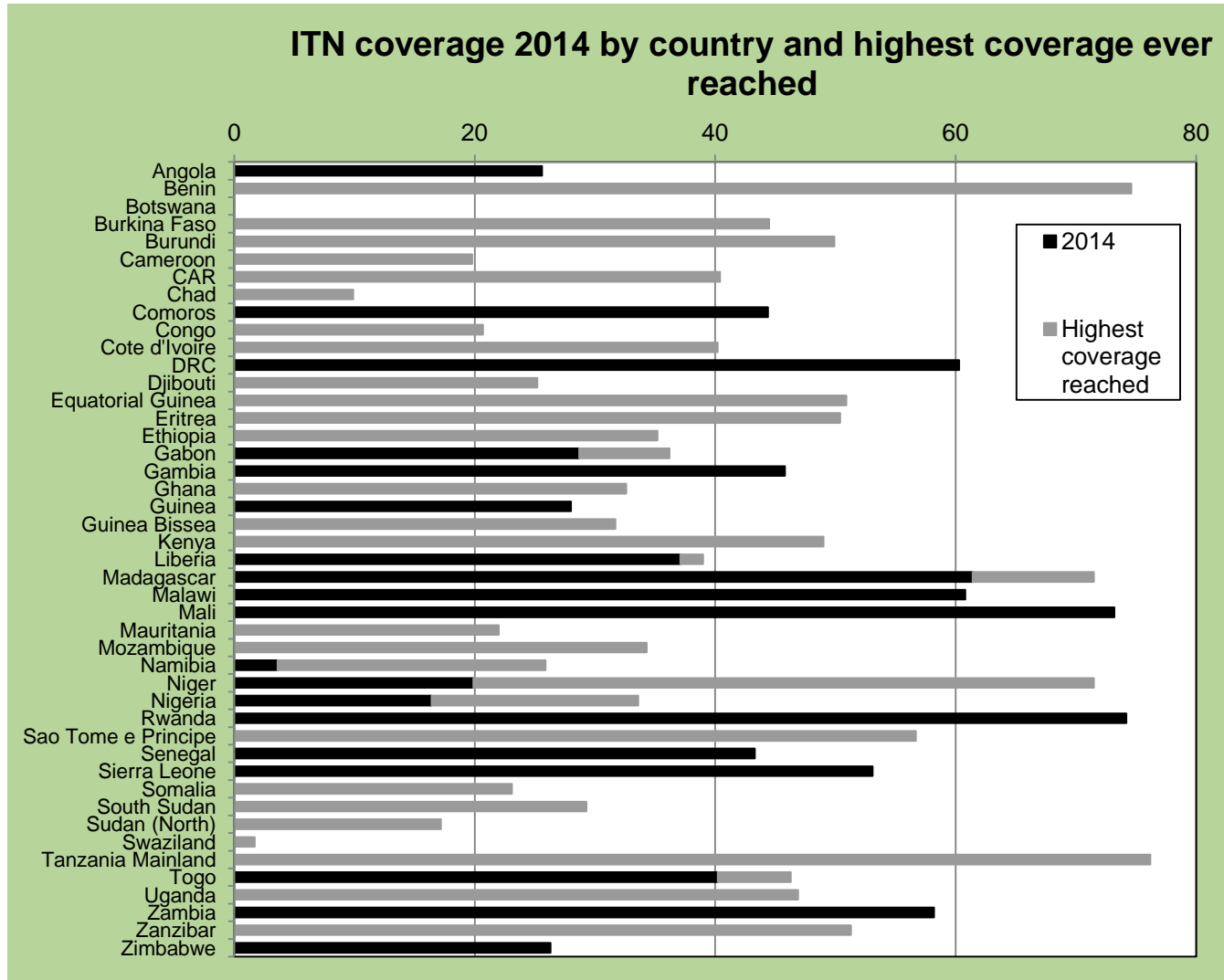
Coverage targets



IPTp coverage



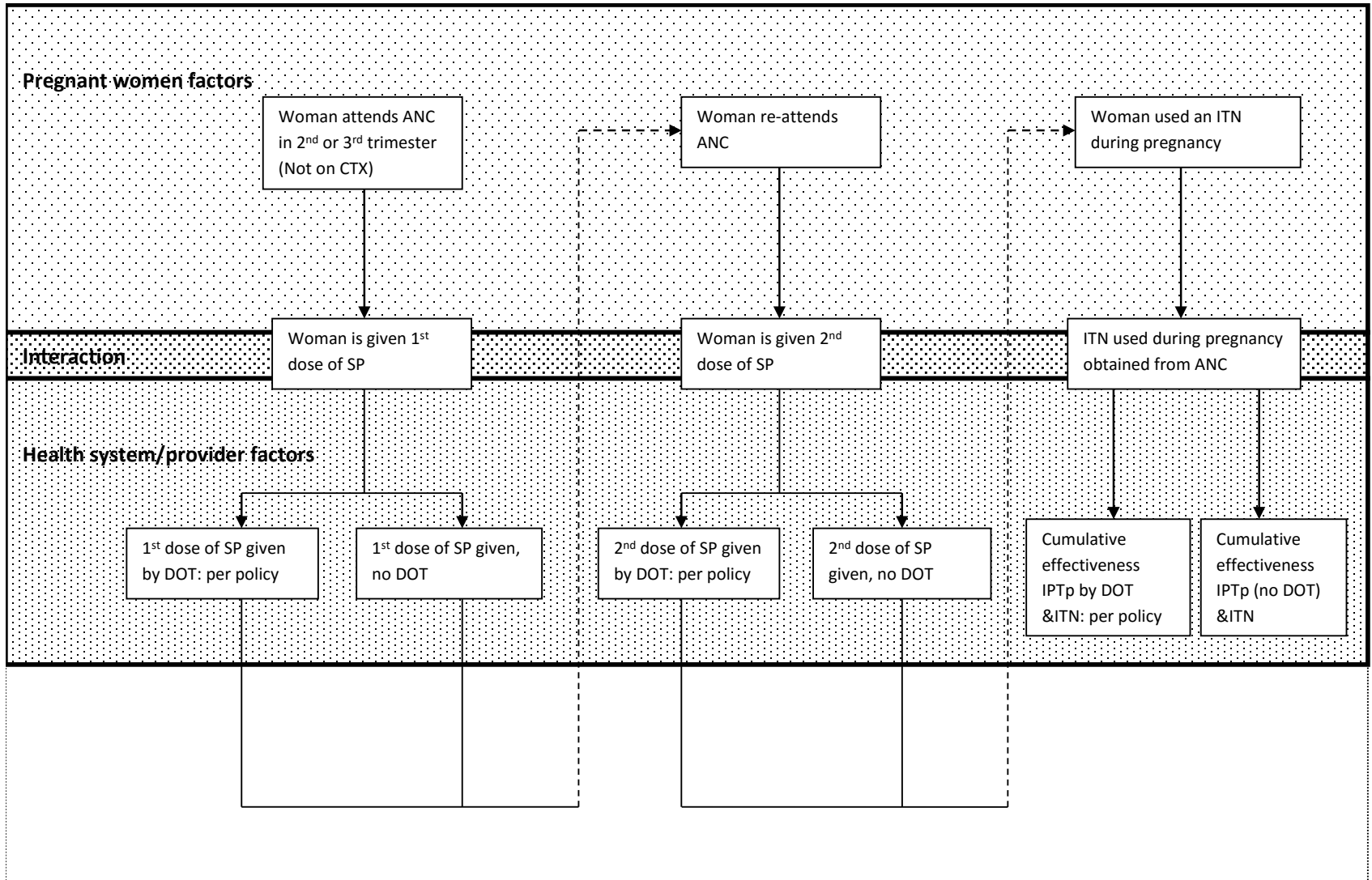
ITN coverage



Bottlenecks to delivery and uptake: Cross sectional surveys

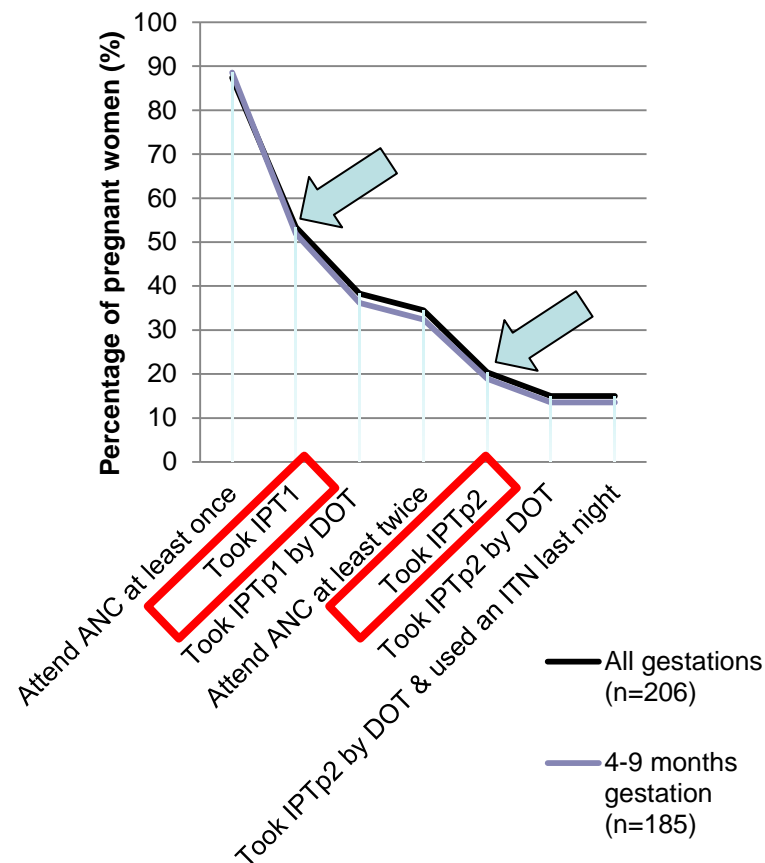
- Aim:
- To identify and quantify the major barriers to the scale up and use of interventions to control malaria in pregnancy at the district, facility, and community level
- Study countries: Mali (MRTC) and Kenya (KEMRI/CDC)
 - Household surveys to assess barriers to access (questionnaire and ANC card check)
 - Health facility surveys to assess bottlenecks to service delivery (ANC observations and exit interviews)

Household survey



Community level effectiveness: Kenya

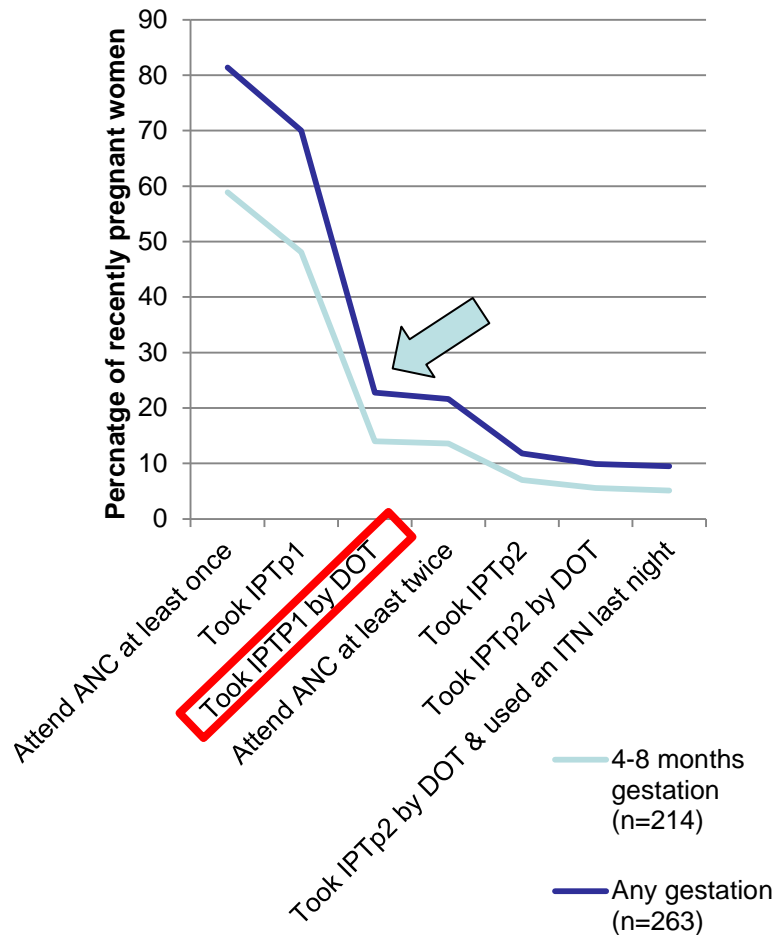
IPTp by DOT



- Reported data, ANC card check
- 89% first attend ANC in eligible trimester (4-9 mo)
- Cumulative effectiveness of 2 doses of SP by DOT 14%
- Reduction in community effectiveness due to missed opportunities of 231 LBW cases averted per 10,000

Community level effectiveness: Mali

IPTp by DOT



- Reported data; ANC card check
- 58% first attend ANC in eligible gestation (4-8 mo)
- Cumulative effectiveness of receipt of 2 doses of SP by DOT 6%.
- Some doses given in 1st trimester (documented + reported)
- Reduction in community effectiveness due to missed opportunities of 228 cases of LBW per 10,000 women

Barriers to uptake: Pregnant women

Factors Affecting the Delivery, Access, and Use of Interventions to Prevent Malaria in Pregnancy in Sub-Saharan Africa: A Systematic Review and Meta-Analysis

Jenny Hill^{1*}, Jenna Hoyt¹, Anna Maria van Eijk¹, Lauren D'Mello-Guyett¹, Feiko O. ter Kuile¹, Rick Steketee², Helen Smith³, Jayne Webster⁴

Individual level factors

- Low knowledge of benefits of IPTp
- Fear of perceived side effects; Experienced side effects
- Lack awareness timing/dosing
- Confusion about which drugs are safe; Perception SP strong /miscarriages
- Poor ANC attendance

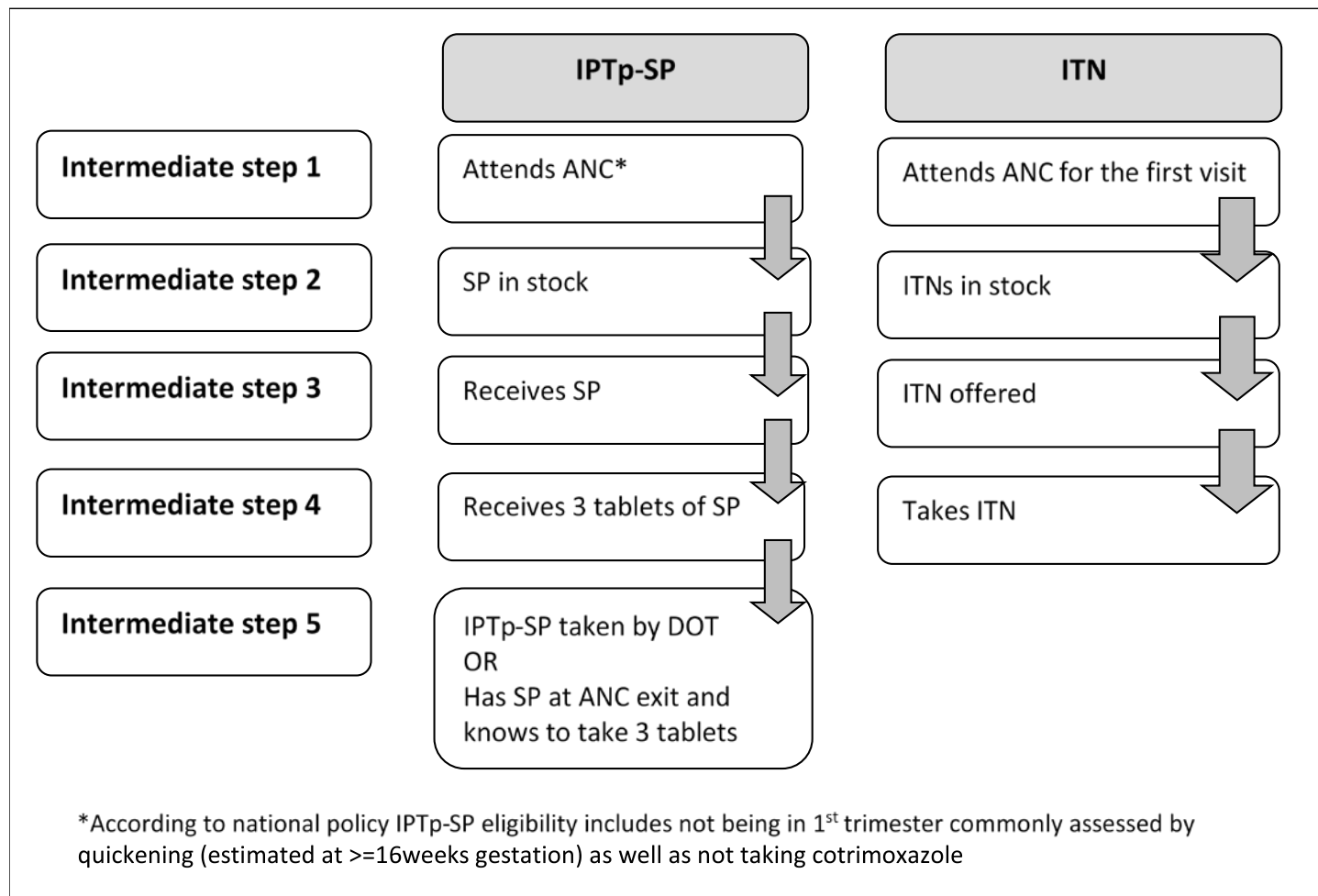
Household /cultural factors

- Having to purchase SP/drinks
- Unwilling to reveal pregnancy
- Needing husbands support or consent; Commitments at home (child care)

Health facility factors

- User fees & penalties
- Stock outs of SP
- Not being offered SP by health worker
- ANC cards not being updated properly
- Need to share cup to take medication
- Referred to laboratory
- Taking folic acid and iron sulphate supplementation

Health system



Programme effectiveness of delivery: Kenya

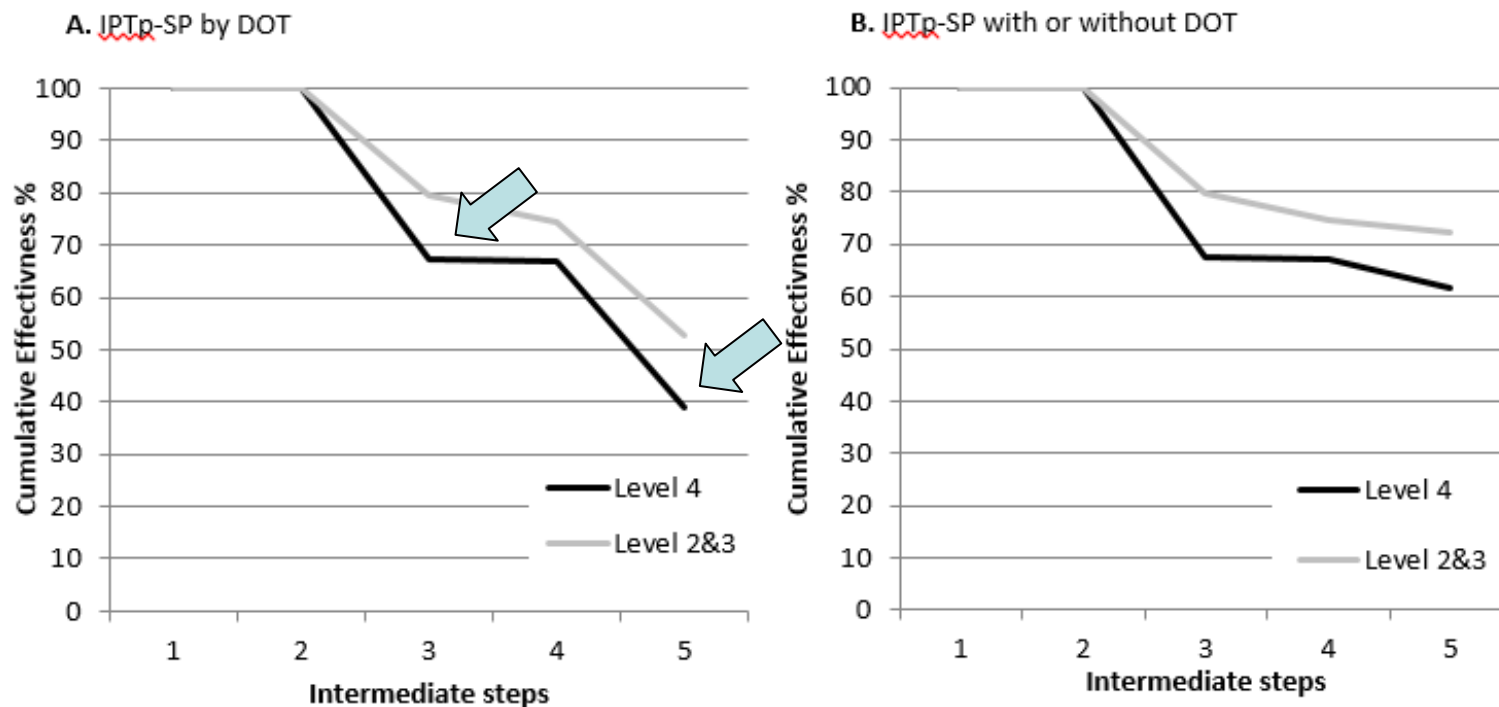


Figure 2. A. Cumulative system effectiveness for the delivery of IPTp-SP by DOT through ANC and B. Cumulative system effectiveness for the delivery of IPTp-SP through ANC either by DOT or pregnant women having 3 tablets of SP at exit and knowing how to take them. Intermediate steps are as follows: step 1, Eligible pregnant women attend ANC in her second trimester; step 2, SP is in stock; step 3, SP is given to the pregnant women; step 4, the correct dose of SP is given (3 tablets); step 5, the pregnant women take IPTp-SP by DOT (A) or either by DOT or pregnant women having 3 tablets of SP at exit and knowing how to take them (B).

Programme effectiveness of delivery: Mali

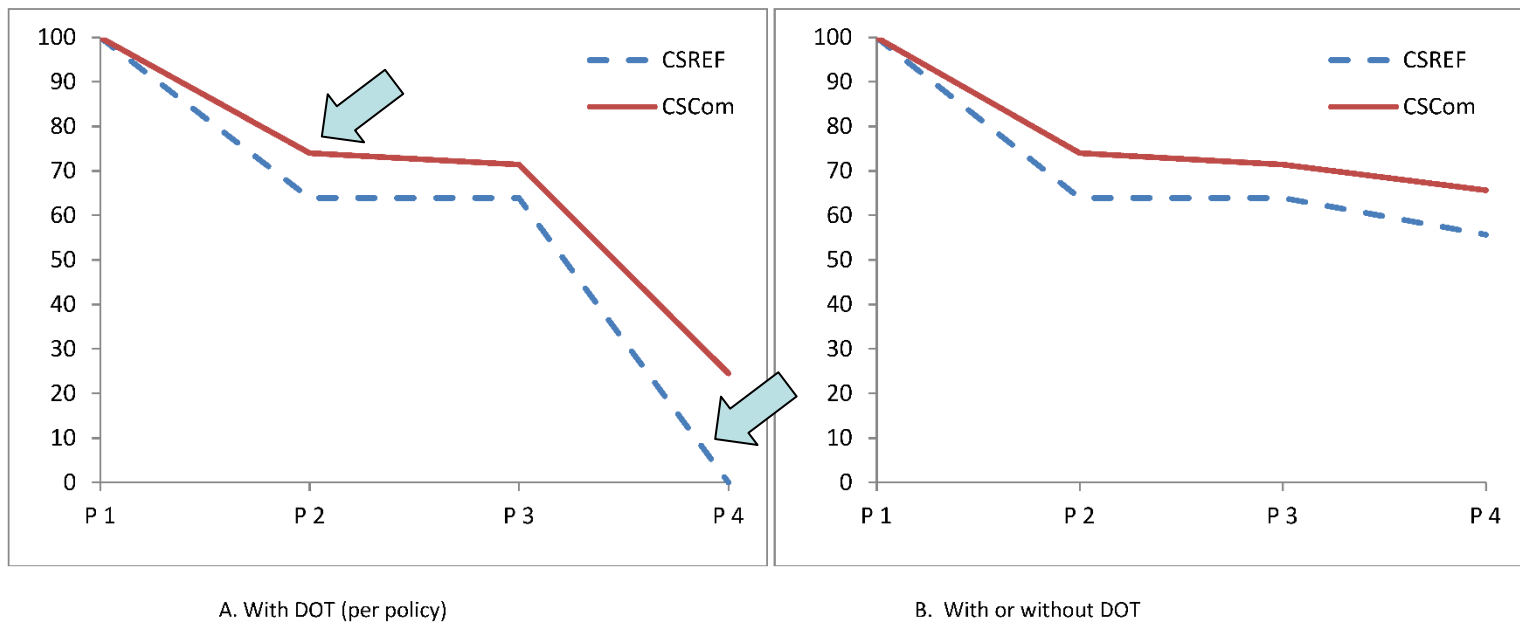


Figure 2: Proportion of pregnant women of 4 to 8 months gestation on their first visit to ANC who received IPTp-SP

Note P1=Attend ANC; P2=receive any SP (sulphadoxine-pyrimethamine); P3=receive 3 tablets of SP; P4=A. Take by DOT (Directly Observed Therapy), B. Take by DOT or take the tablets home

Interviews with health providers: Mali

- Guidelines – lack of knowledge, misinterpretation, insufficient guidance
- Side effects of SP - substantial worry for providers
 - don't give on empty stomach
 - don't give at all **OR** give tablets to take at home even if don't believe women will take them?
- Not giving by DOT institutionalised.....

Barriers to delivery: Health system

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Individual level factors:

- Confusion about timing & dosing
- Low knowledge of IPTp strategy; of side effects & contraindications of SP
- SP distributed regardless of gestational age; Imprecise estimation of gestational age
- Perception that women will not take SP on empty stomach

Organisational factors:

- Staff too busy to distribute SP
- Lack of water cups at facility
- Health instructions about malaria not given in local language
- Variation in guidance given to staff
- IPTp guidelines not available

Health system factors:

- SP stock outs
- Lack of supervision
- User fees for IPTp
- Lack of recent IPTp training
- Private healthcare facilities dispensing other malaria drugs
- Incompatibilities of IPTp with other health programs

Conclusions and implications

- We are not making the most of women who do access ANC
 - Knowledge on malaria, IPTp and ITNs important for **both providers and pregnant women**
 - Many of the obstacles to IPTp-SP delivery are relatively simple (individual or organisational level) barriers that can be resolved in the short term
-
- What comes next is more complex.... ***tomorrow morning**

WHO 2012 policy update: Policy brief



Updated WHO Policy Recommendation (October 2012)

Intermittent Preventive Treatment of malaria in pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)

- At each scheduled ANC visit
- First dose as early as possible during the 2nd trimester
- At least 1 month apart
- Last dose can be administered up to the time of delivery, without safety concerns
- Directly observed therapy
- Can be given on empty stomach
- Not with folic acid 5 mg



WHO Global Malaria Programme
WHO Department of Reproductive Health and Research
WHO Department of Maternal, Newborn, Child and Adolescent Health

WHO Policy Brief for the Implementation of Intermittent Preventive Treatment of Malaria in Pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)

11 April 2013

- IPTp can be given on an empty stomach or with food
- Woman presenting to ANC with symptoms of malaria should be investigated before administration of IPTp-SP
- Side effects should be discussed openly and managed in the ANC

What can programmes do to increase delivery effectiveness?

Routine data for assessing programme effectiveness

- Two districts in Kenya and Mali
- Review of indicators required to assess effectiveness of delivery of IPTp-SP (2012 policy update), ITNs and case management
- Development of list of indicators*
- Adapted data collection tools in all health facilities
 - Modified ANC register + SOP
 - Collation from the ANC registers into daily tally sheets for nurses

AIM: To integrate within DHIS-2

MiP Indicators, all by trimester

- ANC clients (1,2,3,4,4+ visits)
- Given IPTp (1,2,3,4) **by DOT; not by DOT**
- Given ITN
- Clinical malaria
- **Suspected malaria given test (RDT or microscopy)**
- **Tested +ve (RDT or microscopy)**
- **Clinical malaria given antimalarial (ACT, quinine, other)**
- **Confirmed malaria given antimalarial (ACT, quinine, other)**
- **No of pregnant women in catchment area**

Monitoring and Evaluation

Assessed for completeness, accuracy and validity

- Data collected in health facility registers and collated at the facility level to send to district level assessed for completeness & accuracy over one year
 - Data completeness was assessed as the proportion of all health facilities reporting to the DHIS2 on each indicator monthly
 - Data accuracy between the monthly reports sent to the District with records in the facility ANC register (tallied by monitor)
- Data validity assessed using exit interviews with pregnant women and ANC card checks in a cross sectional survey**
- In depth interviews with health providers**

**analysis ongoing

Acknowledgements

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- MRTC Mali (Kassoum Kayentao, field team)
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Thank You!

Discussion points

- How to improve coverage (delivery and uptake) now, recognising that what comes next is more complex?
- Has WHO 2012 updated 'simplified' policy made a difference?
- What indicators are being used now?
- Potential of DHIS-2.....