INDEPTH Network Effectiveness and Safety Studies Platform (INESS)

Update-INDEPTH AGM 2010

Aziza Mwisongo INESS secretariat

Sep, 2010



INESS objectives

- To develop and maintain a phase IV Effectiveness and safety studies platform.
- To assess the effectiveness, and determinants of effectiveness, of new malaria treatments in real world health systems. m in antimalarials in Africa
- To evaluate safety of new treatments through a comprehensive pharmacovigilance in a health system context



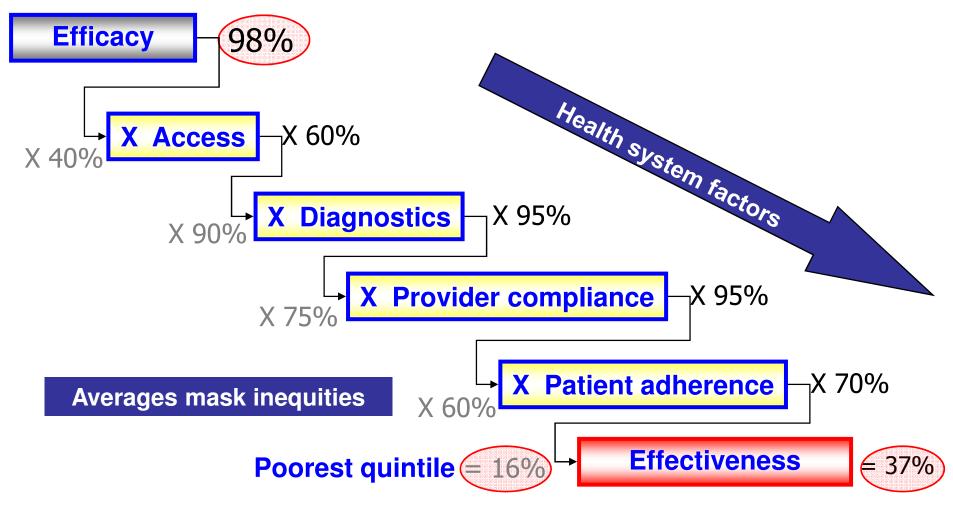
Challenge for INDEPTH HDSS

- →To move beyond population health observatories to include a health system observatory function
- →To link population health and health behaviours to health services and to health system behaviours



Driving with the brakes on: How interventions lose traction in health systems

Example of ACT anti-malarial treatment in Rufiji DSS in 2006



Data source: IMPACT Tanzania. Effectiveness data are actual. Poorest quintile estimates are hypothetical

What does this mean?

 Presently more traction can be gained by removing health system bottlenecks than by improving the efficacy of new drugs.



INESS Technical approach for systems effectiveness

So seven linked study modules for the effectiveness estimation:

| Module | | Task team facilitator | Level |
|--------|------------------------------|-----------------------|-------------------|
| 1 | Access | STI | HH |
| 2 | Diagnostic targeting | CDC | HF |
| 3 | Provider compliance | CDC | HF |
| 4 | Patient Adherence | STI | НН |
| 5 | Community acceptability | CDC | Community & HF |
| 6 | Contexts and other effects | STI | District & HH |
| 7 | Costs and cost effectiveness | SPH | District, HF & HH |



Other supportive modules of INESS

- Safety Monitoring
- Data Linkage
- Data analysis and synthesis



Module 1. Access

→ Main purpose:

 determine proportion of cases needing to seek care that actually gain physical access to a point of provision

- Ongoing Household surveys of fevers in prior two weeks through HDSS rounds
- Will provide total annual fever burden
- Plans to analyze across time, space, socio-economic quintiles and provider characteristics



Module 2 & 3. Diagnostic targeting & Provider compliance

→ Main purpose:

- determine the proportion of cases having access that are correctly diagnosed / classified
- determine the proportion of correctly diagnosed cases that are provided with the correct treatment

- On going Health facility / provider surveys
- Sampled at peak and low seasons –all sites collected one season data
- Exit interviews with gold standard diagnostic
- Assesses stock-outs and quality of drugs on hand



Module 4. Patient adherence

→ Main purpose:

 Estimate proportion of patients who receive treatment who use it as intended; and the proportion who are satisfied with the treatment

- Household survey ongoing
- Standard interviews for adherence and acceptability
- Further follow-up and filter paper blood at day 28 (and 42 depending on ACT)
- RDT taken



Module 5. Community acceptance

→ Main purpose:

 Examine the social, cultural and behavioural factors that facilitate or impede uptake and adherence to new ACTs when introduced

- Community survey of three different populations
 - → Persons having a recent malaria fever episode (45-50 interviews)
 - → Adult men & women living in DSS area (15 FGDs per year)
 - → ACT providers (15-20 interviews)
- Two communities <5km and two communities >5km from ACT



Module 6. Contexts and additional effects

→ Main purpose:

Estimate the contribution to reduced morbidity & mortality.

- Training on the module has been concluded in August 2010
- HMIS document reviews for trends and patterns in:
- DSS database and VA review for trends in:
- Other contextual data (rainfall, EIR, molecular markers for resistance)
- Plans to repeat therapeutic efficacy (100 patients)



Module 7. Overall effectiveness and costs

→ Main purpose:

Determine the effectiveness, and the determinants of effectiveness

- Plan to put it all together
- Determine overall population effectiveness by equity quintile
- Determine the efficacy losses, and where the greatest losses occur



Safety Monitoring module

→ Main purpose:

 To strengthen existing safety monitoring system and to collect longitudinal data on safety of ACTs

- Spontaneous adverse event reporting system strengthened
- Active cohort event monitoring ongoing
- Plans to link Health Information & Demographic Surveillance Systems
- INESS a platform to generate data on safety in pregnancy



Policy analysis module

→ Main purpose: To learn and understand processes and dynamics involved with formulation and implementation of antimalarial policies at international, national and district level

- Module SOPS and tools developed
- Stakeholder analysis of all actors concerned with the policy change; national & sentinel DSS district
- Documentation of national procurement & supply chain (to sentinel district)
- Document analysis of Rx guidelines



Data linkage module

 Main purpose Provide a mechanism to identify HDSS residents visiting HF and link their information

- INESS data linkage softwares developed and applied
- Biometric enrolment is ongoing in the HDSS
- Piloting of the system in health facilities is ongoing
- To fully operationalise the data linkage system to link data sets



Thank you

