Research and Policy Change:
Can we actually make a difference?

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Implementation Science Mini-Course
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Overview

- Brief introduction to policy-related elements of research
- Examples of where research has failed and succeeded in impacting policy

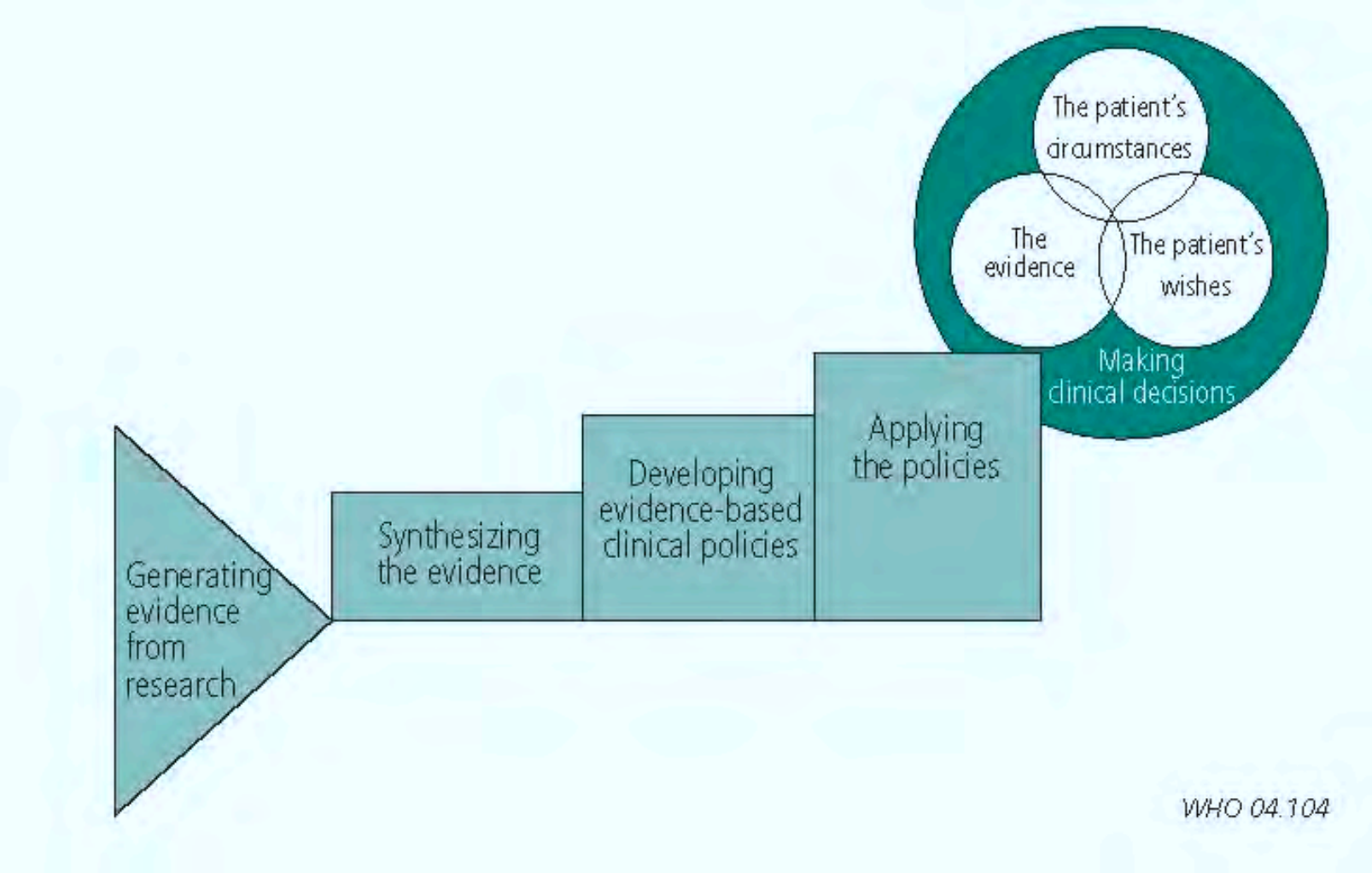
Why policy?

- If I'm a researcher, why do I have to consider policy?
  - Policies are a necessary step for health program implementation of proven interventions
- Goal of research is not the results, but to change
  - Evidence base for decision making
  - Tool to improve operations

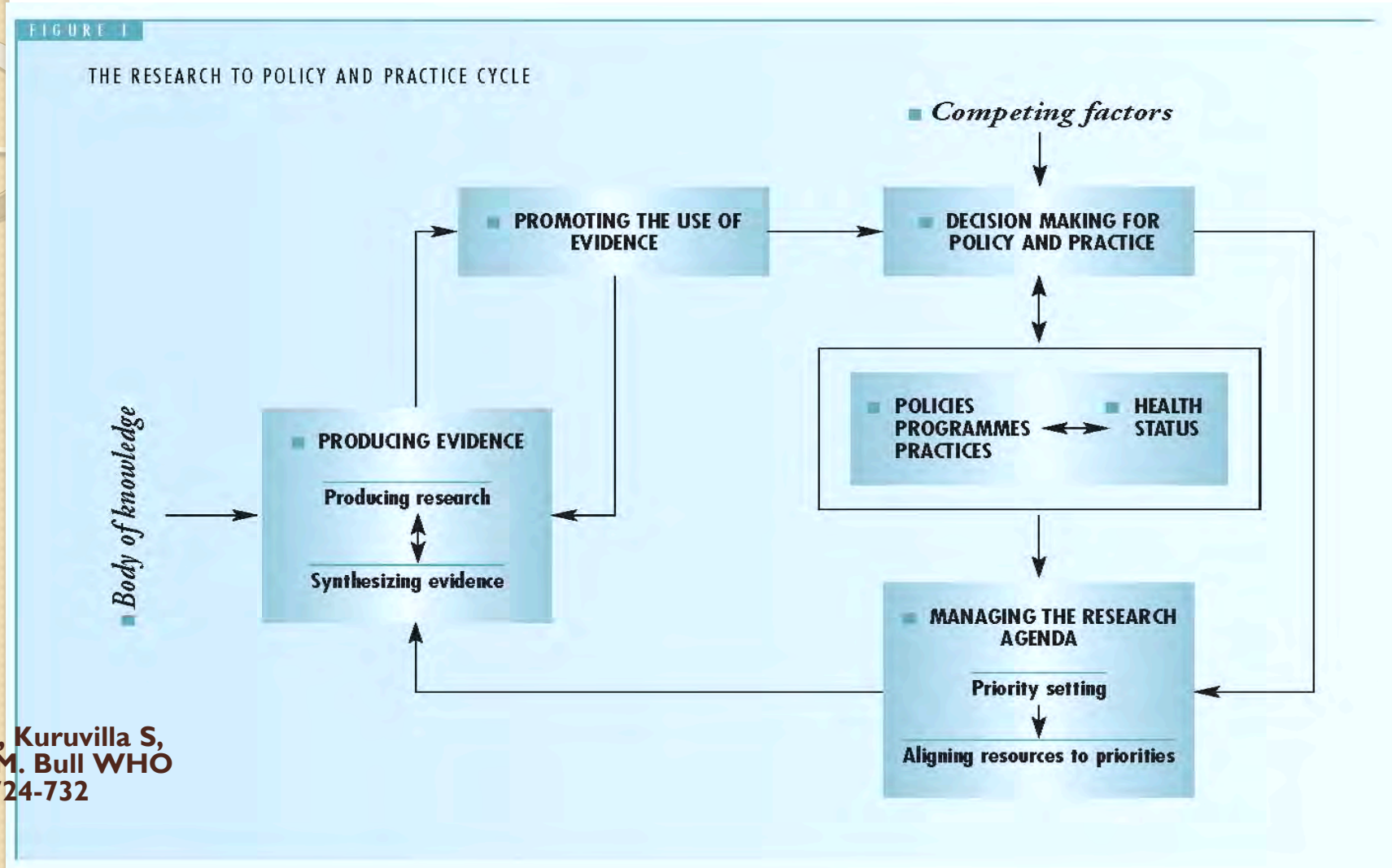
Examples of research influencing policy

- "Easy wins" (pMTCT, IPT)
- Unforseen policy consequences (tecnicos-HAAART)
- Tough sells (ANC in CI, TBAs, syphilis screening in Moz)
- Other examples from students?

Ideal policy cycle

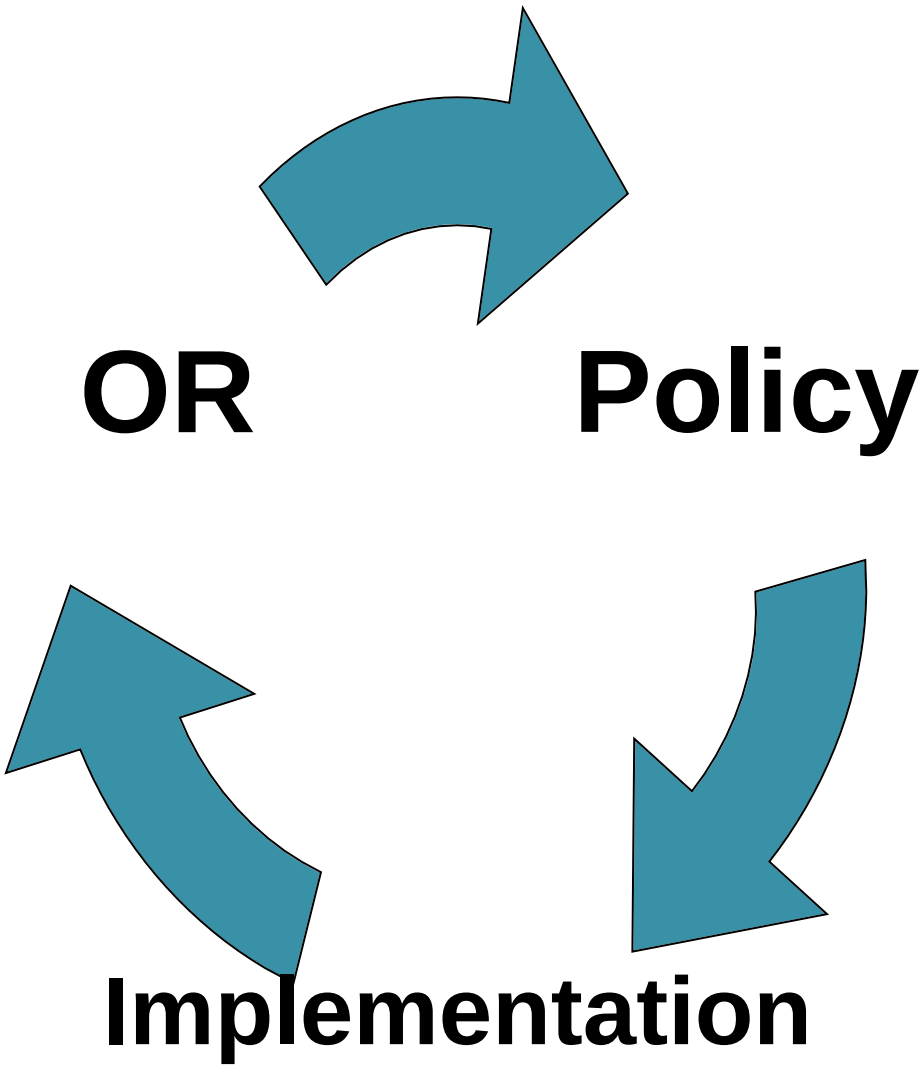


More complex policy cycle



Haines A, Kuruvilla S, Borchet M. Bull WHO 2004;82:724-732

Alliance for Health Policy and Systems Research. Strengthening health systems: the role and promise of policy and systems research. Geneva, 2004


OR
Policy
Implementation

How to influence policy? Remember…..

- Policy setting is NOT a linear, uni-directional process
- In policy context, data don't stand alone –
- Personal and organizational agendas and politics are critical to understand (and use)

Planning OR to influence Policy

- "Buy-in" vs. Technical assistance vs. cooperation
- Find out who defines the problem(s), allocates resources
- Identify policy bottlenecks
- Recognize resource and HR constraints
- Persistence – policy usually takes time to change

What are the constraints?

- "Political Will"—what is it?
- Resource constraints
  - Where do they come from?
  - Local logistics
  - National trade offs
  - Donor priorities
  - SAPs, wage bill caps
- Process constraints—budget planning, procurement systems

Levels of involvement

Ministry of Health	National priorities, equity between provinces, budget process, procurement systems
Delegated Health Authority (district, province, state)	Management burden, procurement systems, infrastructure requirements, local priorities
Health Unit	Human resources, supervision capacity, working conditions and satisfaction, material resources
Community	Awareness, acceptability, affordability, access (CBPR)

Instructive policies & impact of research

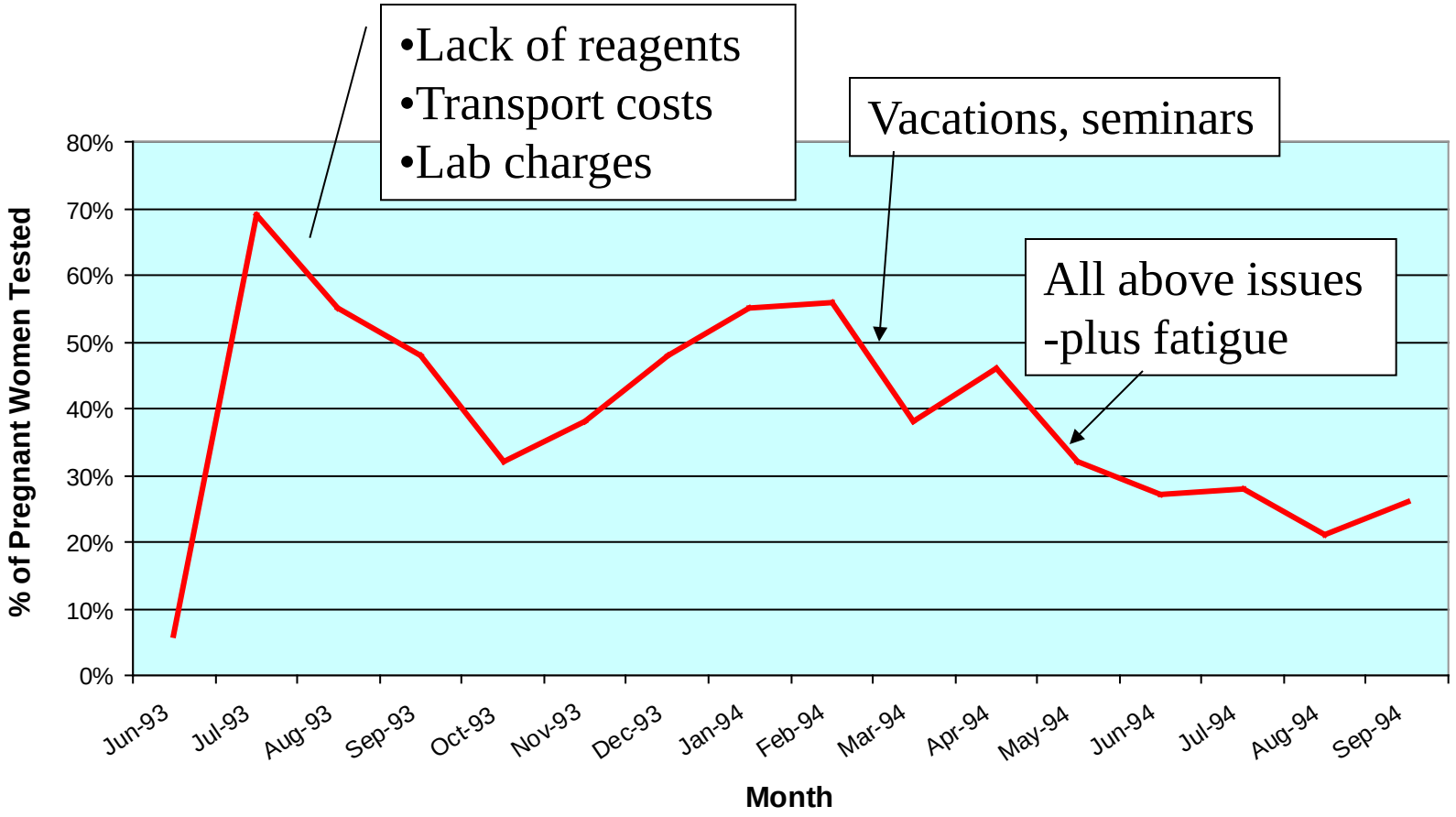
- Community-based ARV adherence groups ('clubs') in Mozambique
- Bimanual vaginal examinations during antenatal care in Cote d'Ivoire
- Implementation of antenatal syphilis screening (discussed in previous lecture)
- Impact of Traditional Birth Attendant training

Syphilis Screening in Pregnancy (1)

- Unequivocal evidence on efficacy of intervention
- 1978: Universal antenatal syphilis screening made national policy in Mozambique; sporadic & uneven screening
- 1993: Prenatal Syphilis Screening Feasibility Study
  - 11 health facilities, training, development of a facility registry book, externally purchased RPR
  - Rapid increase in RPR screening (<5% to 70%)
  - Advocacy:
    - Presentations (provincial & national level conferences, Minister of Health, Council of National Directors)
    - Article and editorial in national medical/health journal
    - Multiple informal meetings with MOH, UN, Bilaterals

Pilot intervention, 1993-94

11 Health Posts - Manica Province, Mozambique



Syphilis Screening in Pregnancy (2)

- 1996: Syphilis screening made a key element in national 5-year plan
  - Provincial Medical Director in Manica province adopted program as a priority
  - Increased total screening rate of pregnant women to 50-60% in health facilities with laboratories (one province)

Example of intervention: Prenatal Syphilis Screening (with RPR) in Mozambique

Problem

- **With increasing effort of nurses, screening & treatment rates rose from ~5% to ~60%**

- **Difficult to get beyond 60%**
  - **Bottleneck:**
  - **Women were sent for testing but were not tested or did not return for results**

Prenatal Syphilis Screening intervention

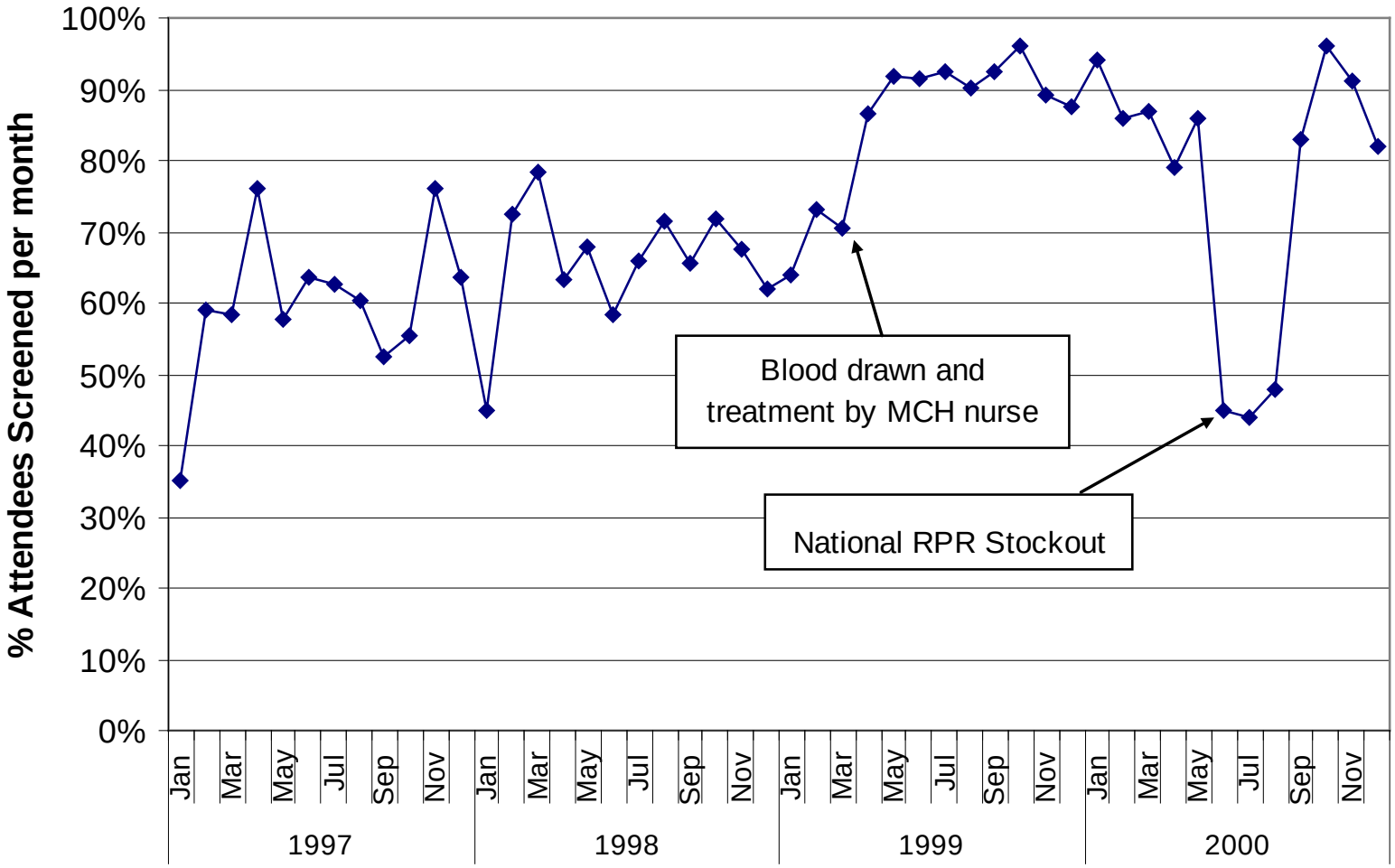
Health facility initiatives to improve patient flow and efficiency

- Blood draw by MCH nurses (rather than laboratory) with batch testing of samples
- Transport of sample batches to labs where necessary

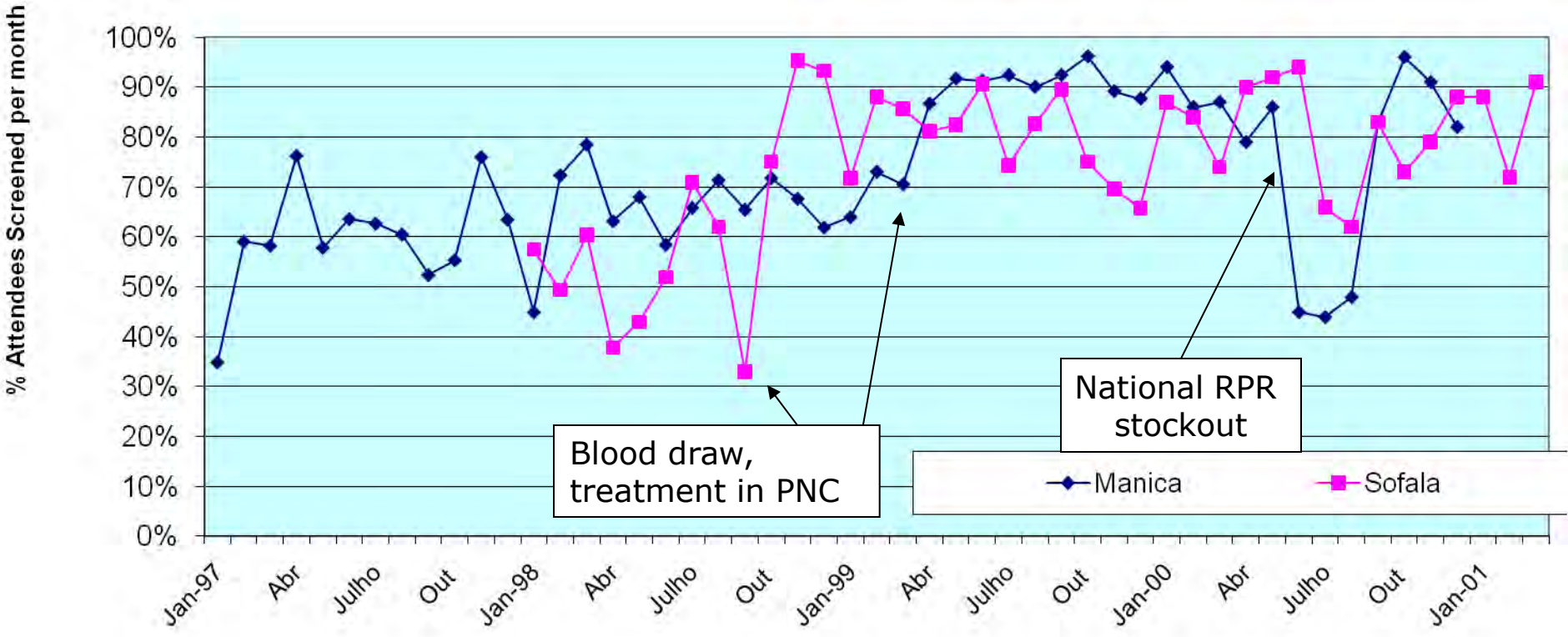
Facilitated:

- Same day results at most health facilities
- Treatment by MCH nurses (rather than STD clinics)

Prenatal Syphilis Screening, Mozambique
Proportion of women screened per month



Prenatal Syphilis Screening, Mozambique
Proportion of women screened per month



Syphilis Screening in Pregnancy (3)

- 1998: Syphilis screening extended to all districts in neighboring province
  - Percentage of ANC attendees tested increased to 80% at the health facilities with laboratories
  - Over 7,000 RPR positive women identified that year (~70% treated)
- 1999: Sustained results with no donor input

Prenatal Syphilis Screening
Results & Problems

- Markedly increased testing and treatment

But…..

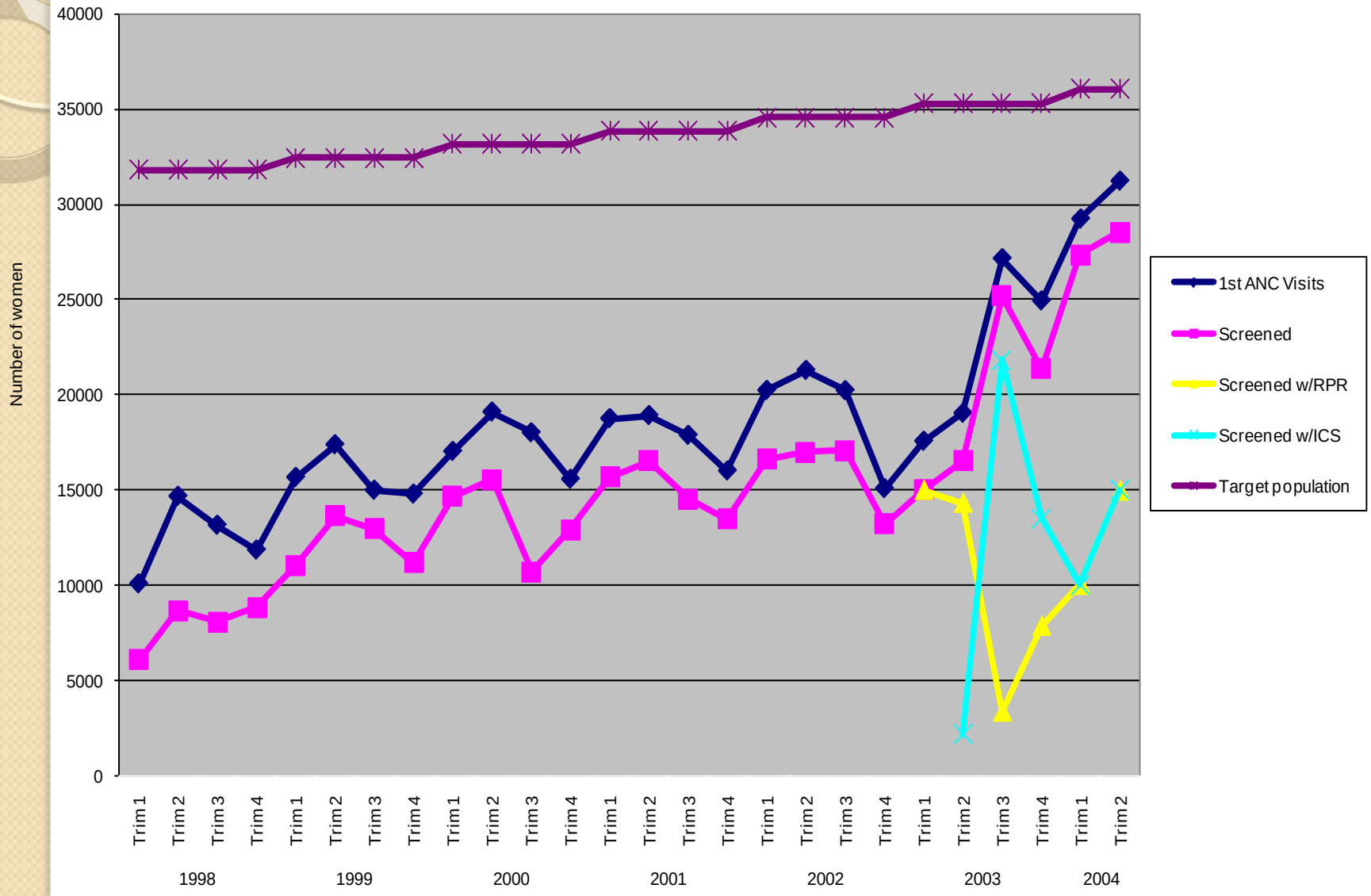
- National shortage of RPR created
- Penicillin shortages
- Charging for Penicillin (national cost recovery policies)
- Shortage of syringes (especially with non-reusable syringes)
- Increased demand for screening in health facilities without labs or electricity
- No official monitoring system or targets

Syphilis Screening in Pregnancy (4)

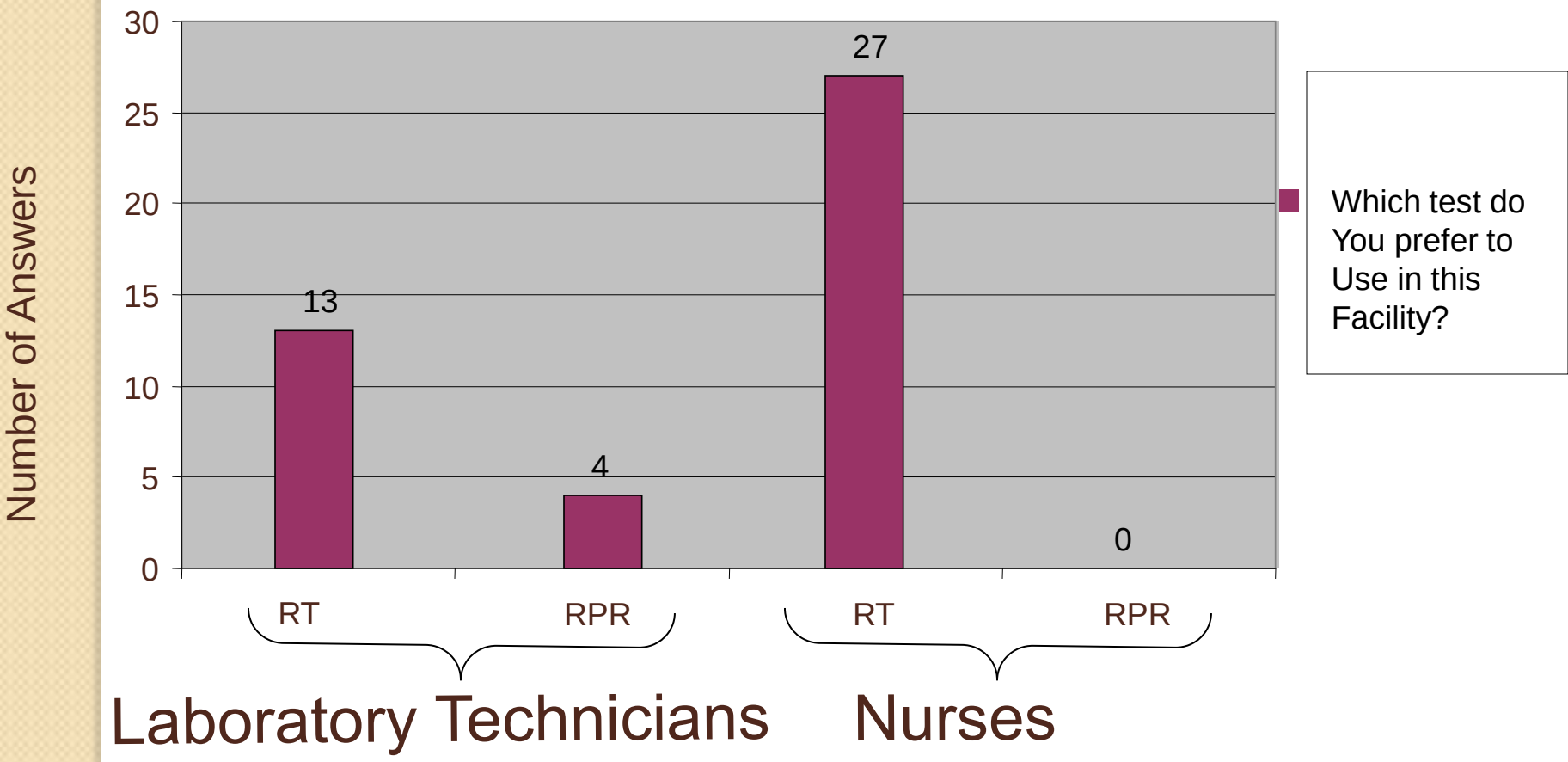
- 2000: Free treatment for pregnant women as a national norm & MCH nurses empowered to treat RPR+
  - Treatment rate increased to 90%

- 2003: Introduction of rapid treponemal Immunochromatographic strip (ICS) test pilot project (with MOH/Gates Foundation)
  - Number of facilities screening increased from 45 to 132 (100% of those with ANC)
  - Percentage of ANC attendees tested increased to 93%
  - Over 80,000 women tested annually
  - Over 8,000 syphilis positive women identified per year (96% treated)

Syphilis Screening in Pregnancy Central Mozambique, 1998-2004



Syphilis Screening in Pregnancy (5)
Health Worker Satisfaction Survey



"Takes less time…" "…Can be used in health facilities without laboratories…" "…Is easy to read…" "…Doesn't require much blood…" "…Reduces the waiting time of the mothers…"

Syphilis Screening in Pregnancy (6)
Cost-effectiveness analysis of RPR/strip test (US$)

	Clinics with laboratories	Clinics without laboratories
RPR women screened	$0.85	
RPR positive women screened and treated	$12.25	
RPR active cases screened and treated	$13.19	
ICS women screened	$0.98	$0.96
ICS positive women screened and treated	$13.45	$14.76
ICS active cases screened and treated	$13.90	$15.26

Syphilis Screening in Pregnancy(7)

- Rapid test has become national policy
  - For use in facilities without laboratories
  - Procured directly by the MOH

Syphilis Screening in Pregnancy (8)
Determinants of Success

- Constant advocacy
- Close partnership with MOH
- 10 years of frequent operations research to:
  - Implement policy
  - re-shape policy
- Right tool for the right job at the right time
  - Problem was a priority of policymakers
  - Tests were available and cheap (RPR), or innovations were appropriate, responded to need, and made life easier (rapid test)

Impact of Traditional Birth Attendant training in Rural Mozambique (1)

- The MOH had established a TBA program whose goals were to reduce maternal and infant mortality and to improve utilization of primary health care
- Over 8 years, an NGO program had trained >300 TBAs who were supported by quarterly supervision, basic equipment, and annual refresher courses
- Post training and supervision surveys showed that TBAs had improved their knowledge of obstetric emergencies and skills in how to manage them
- An evaluation was planned to assess whether the program had met its initial goals

Impact of Traditional Birth Attendant training in Rural Mozambique (2)

- A retrospective cohort study was designed to compare maternal and newborn outcomes in 40 communities where TBAs had been trained and had at least 3 years of experience - compared to 40 communities where TBAs had not yet been trained.
- Respondents were queried on utilization of TBA or health facility services for pregnancy and childbirth, outcome of pregnancy for mother and child, and utilization of other primary health care services

Impact of Traditional Birth Attendant training in Rural Mozambique – RESULTS (3)

- Only 33% of pregnant women who lived close to trained TBAs utilized the TBAs. More women (43%) managed to deliver at health facilities. Breakdown:
  - Women with access to a trained TBA
    - 43% birthed at health facility;
    - 33% birthed with trained TBA;
    - 24% birthed with an untrained person
  - Women with little access to trained TBA
    - 58% birthed at health facility;
    - 42% birthed with an untrained person
  - Women with access to a health facility with a midwife
    - 77% birthed at a health facility
    - 22% birthed with an untrained person
- Most women (79%) preferred health facility midwives for their next birth; however, many users of trained TBAs preferred TBAs for their next birth
- Utilizers and non utilizers of trained TBAs (including utilizers of health facilities) had similar (not statistically significant) mortality rates
- Policy eventually shifted away from TBA support and towards health facility support

Preference for future births

Experience	Group 1 (trained TBA)	Group 2 (no trained TBA)	Group 3 (HF with midwife)	Total weighted average
% prefer health facility for next birth	61%	83%	93%	79%

TBA OR to Policy

- Key decision-maker rejected the results of the study – likely because of her investment in the program and donor support
- Findings not adopted or integrated until there was a change in staff at the MOH level
- Policy eventually shifted over time away from TBA training and towards improving maternities
  - 5 years after study…

TBA OR to Policy

- Right question, but wrong timing
  - TBA training initiated despite evidence on efficacy
  - Key decision-maker rejected it because of her investment in the program and donor support
  - Insufficient engagement of the right people from the outset
  - Findings not adopted or integrated until there was a change in staff at the MOH level
    - And global transition away from TBAs

PMTCT Cascade Analysis in Cote d'Ivoire (March 2012-current)

- Opportunistic – HIVCore USAID funding
- Local scope proposed (northern region only)
- USAID/CDC proposed national scope – option B rollout
- MOH agreed on (and approved) national scope

PMTCT Cascade Analysis in Cote d'Ivoire (March 2012-current) (page 2)

- Revised scope of study, budget, with stakeholders (30 sites, random selection, broader questions) – 6 month delay
- Got MOH to lead process (delayed much of process)
- Sudden change in Minister of Health
- Too late for Option B but will likely have policy implications
- Hopefully we can get MOH to use us to do OR study of national rollout of Option B

How does this apply to you?

- Your challenge is to figure out how to maneuver data most effectively in your system
  - Who to engage?
  - What dynamics are present?
  - What constraints to consider?

Who to engage?

- Who defines the problems & priorities?
- Whose policy is it?
- Role of researchers, clinicians, managers
- Usually differs by health system level, domestic vs. international
- Monitor frequent changes in responsibility

What dynamics are present?

- Place research evidence within complicated, locally dependent dynamics
  - Personal agendas?
  - Interests?
  - Personal & professional histories?
  - Researcher/policymaker networks?

What Constraints to Consider?

- Resource constraints
  - Where (who) do they come from and what's the probability they will change?
    - Donor priorities
    - SAPs, wage bill caps
- Process constraints – budget & planning process, procurement systems (e.g., who decides on which budgets)

Funding OR may have policy implications

- Research-directed funding
  - Government funding can impact govt policy
    - USAID/PEPFAR TE, now TASCIIIB
    - CDC (ASPH partnerships– i.e. UW-malaria)
    - NIH?
  - Foundations – policy dependent on foundation influence
    - Doris Duke Foundation (Operations Research for AIDS Care and Treatment in Africa – ORACTA)
      - 20 2-year grants awarded, $100,000/year
    - Gates Foundation? (technology implementation of syphilis screening in pregnancy)

- Program-directed funding
  - Multilaterals: WHO (Global Fund), World Bank (TAP)
  - Ministries of Heath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PROCEDIMENTO FINAL DIARIO

Thank you!

Research as a problem-solving tool - depends on the policy context

- Is it the "right job"?
- Is it the right tool?
- Does everyone know how the tool works?
- Are there resources to run the tool?
- Does it make the job easier?