

# Integration of HIV Services

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# Integration

- “Organization, coordination, and management of multiple activities and resources to ensure the delivery of more efficient and coherent services in relation to cost, output, impact and use (acceptability)”

- Source: WHO Technical Consultation on Integration and PMTCT Scale-up, 2006



# Goals of Integration

- Increase coverage
- Improve quality
- Sustainability
- Health System Strengthening
- Generate efficiency
- Stigma reduction



# Integration: Considerations for Discussion

- Effect of new guidelines
- Testing/Treatment cascade
- Integration models for HIV Services
- Integration of PMTCT, Pediatric HIV and MNCH Services
- Topics for discussion relevant to Latin American Consultation



# Integration and the Revised WHO Guidelines

- Adult Treatment Guidelines
  - All patients with TB now ART eligible with little or no delay in initiation
  - All patients with  $CD4 \leq 350$  cells/mm<sup>3</sup> now eligible
- PMTCT guidelines
  - Longer courses of ART including through breastfeeding
  - Pregnant HIV infected with  $CD4 \leq 350$  cells/mm<sup>3</sup> may be prioritized
- Pediatric guidelines
  - Expansion of ART eligibility to first two years of life
  - Increasing use of Protease Inhibitors in first-line regimens



# Testing/Treatment Cascade

- HIV Testing
- PITC at hospitals, STI clinics, TB centers
- VCT centers



- Determination of eligibility for ART



- Initiation of ART



# Testing/Treatment Cascade

- Limitations of a vertical model: Mozambique experience
  - 2005: Day Hospitals created to respond to epidemic
    - 78% of patients testing positive for HIV returned for CD4 testing to determine eligibility
    - 46% of patients of those who returned for results and were found ART eligible starting ARVs
    - No strengthening of the wider system observed



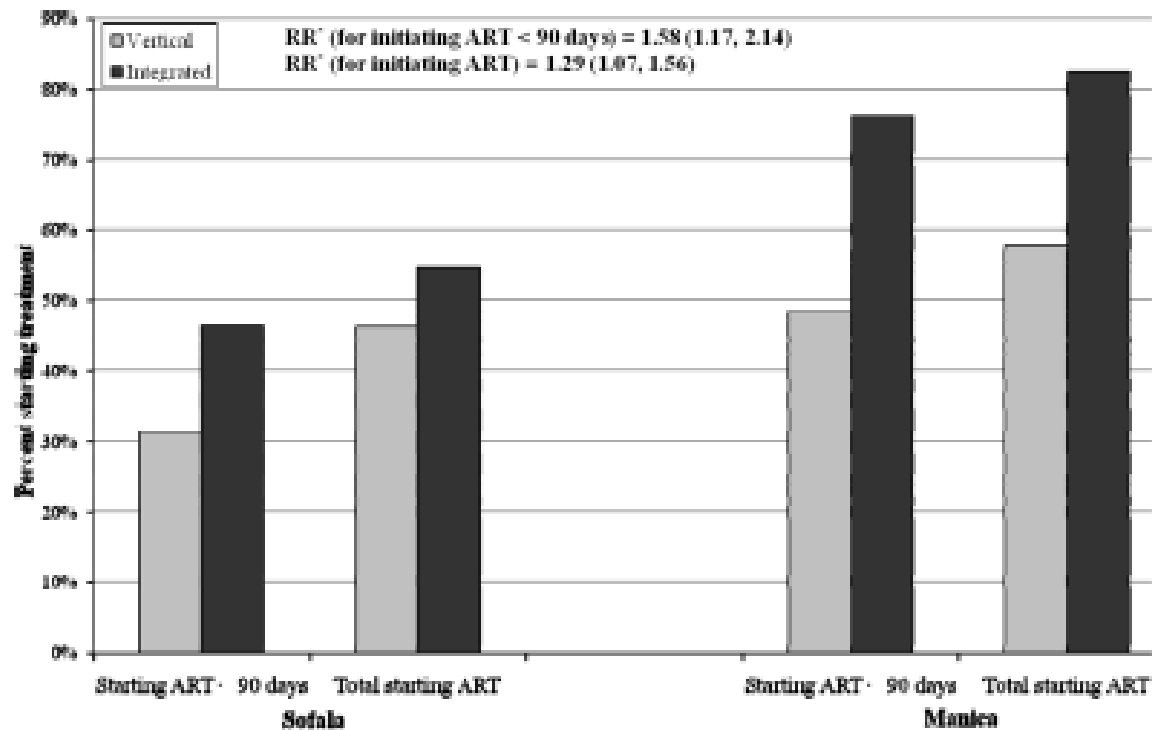
Pfeiffer et al, Journal of the  
International AIDS Society, March 2010

# Mozambique Integration Experience

- Intervention: Decentralization and integration of services within primary health centers
  - Placement of ART services in existing units
  - Retraining of existing workers
  - Strengthening laboratories, testing, and referral linkages
  - Expanding testing in TB wards
  - Integrating HIV and antenatal services
  - Improving district-level management

Pfeiffer et al, Journal of the  
International AIDS Society, March 2010





N=11535 patients from 12 clinics; \*comparing patients attending integrated clinics to patients attending vertical clinics; † Relative risks were calculated in STATA using binomial regression while accounting for clinic-level clustering. Time period: 2004-2007.

**Figure 1** The percentage of eligible patients starting ART by health facility type and province.



Pfeiffer et al, Journal of the International AIDS Society, March 2010

# Other benefits of integration

- Rehabilitation of PHC infrastructure
- Strengthening of supervision
- Fill workforce gaps
- Improve patient flow between services and facilities



Pfeiffer et al, Journal of the  
International AIDS Society, March 2010

# Integration Models for HIV Services

- Primary Health Services
- Tuberculosis centers
- IDU treatment centers
- Referral centers and tertiary care hospitals
- PITC for Sexually Transmitted Infection Clinics
- MCH-PMTCT



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World Health  
Organization

# **Operations Manual**

**for Delivery of HIV Prevention,  
Care and Treatment at  
Primary Health Centres  
in High-Prevalence,  
Resource-Constrained Settings**

**Edition 1 for Field-testing**



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**Chapter 4 Community**

**Chapter 5 Infrastructure**

**Chapter 6 Monitoring HIV services, patients and programmes**

**Chapter 7 Supply management**

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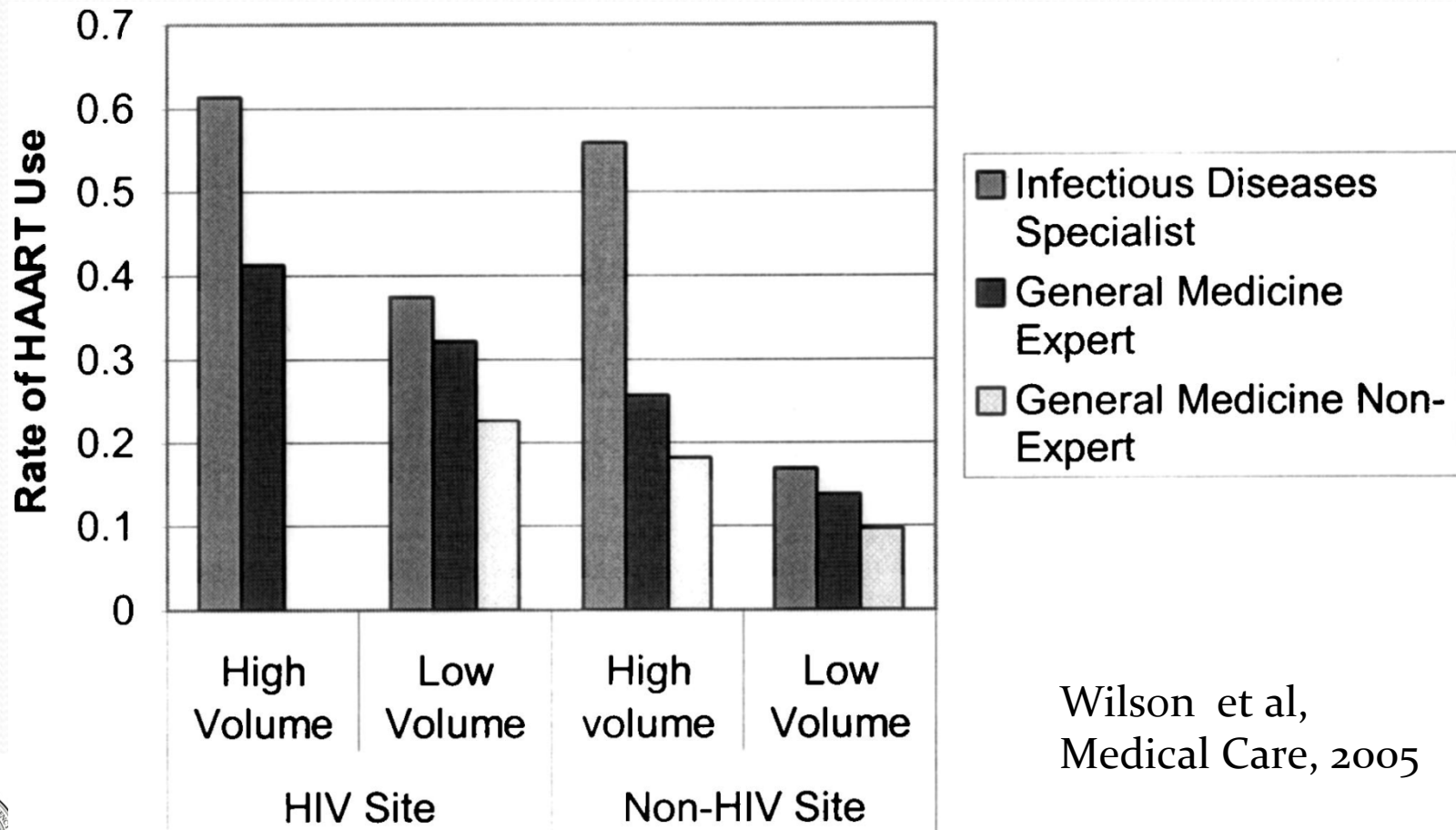
**Chapter 9 Human resources**

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# Integration within Primary Health Centers In Low Prevalence Settings



Wilson et al,  
Medical Care, 2005



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# Issues for Integration of TB Centers

- All patients HIV positive by PITC are ART eligible
- Which model?
  - ART in TB centers
    - Patients need to eventually be referred to ART centers
  - TB therapy in ART centers
    - Decentralization of TB services may be ahead of ART services
    - Other activities of TB centers such as contact screening may be missed
    - Vertical national programs



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# Issues for Integration of IDU Treatment Centers

- Marginalized populations
- Adherence issues
- Opioid substitute therapy
- Criminalization issues



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# Issues for Integration of Referral Centers/Tertiary Care Hospitals

- Advantages:
  - Broader training
  - Focused training (as center of excellence)
  - Laboratory capacity
  - Concentration of difficult cases
- Challenges:
  - Linkages to community care
  - Down-referral to centers with less experience



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# PITC and STIs

- Provider Initiated Testing and Counseling (PITC) for patients with new episodes of Sexually Transmitted Infections (STIs): Cape Town trial
- STI services at primary healthcare clinics
- Intervention (7 clinics)
  - PITC (opt-out) as an integrated part of the STI consultation
  - Counseling performed by nurse
- Control (14 clinics)
  - Referred (or self-referred) for VCT services at the same site as STI services
  - Counseling performed by lay person



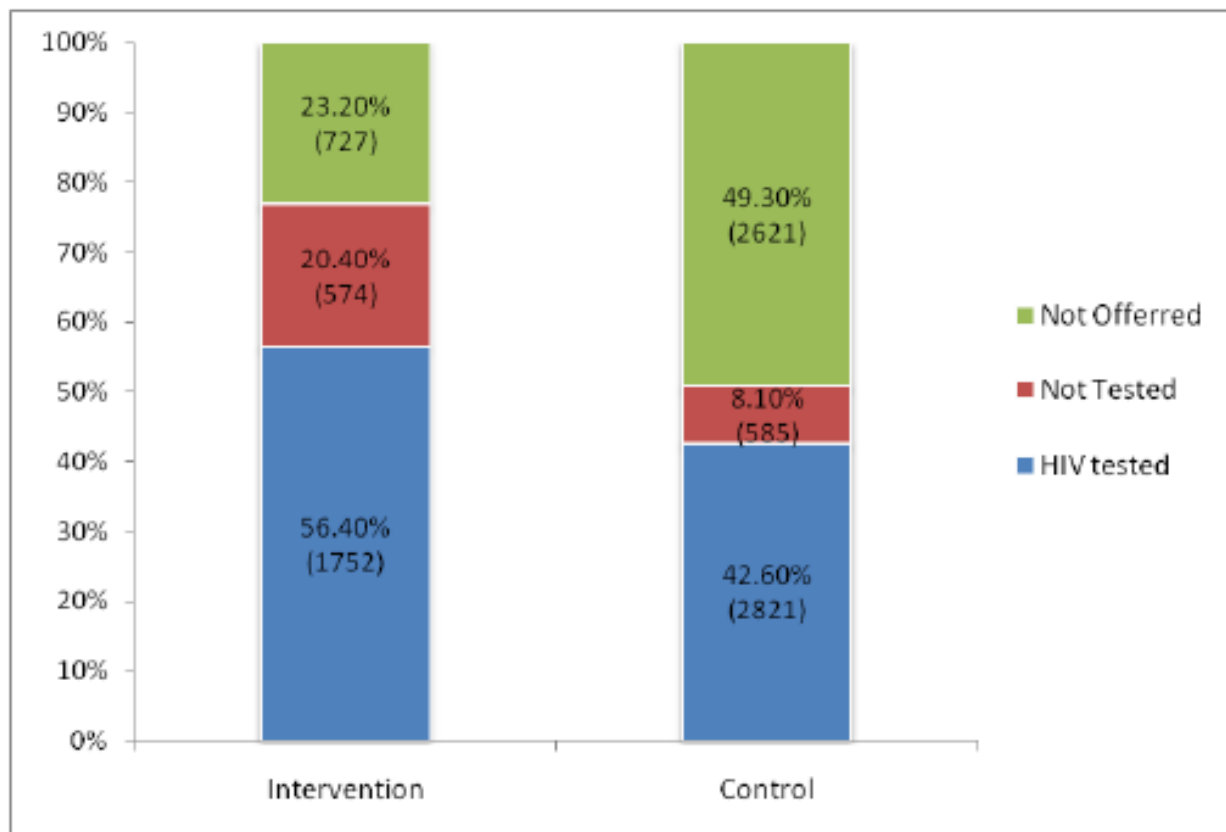


Figure 2 'HIV tested', 'Not tested' and 'Not offered' in intervention and control groups.



# PITC and STIs

- Results:
  - PITC significantly increased proportion of new STI patients both offered (76.8% vs. 50.7%) and tested (56.4% vs. 42.7%)
  - PITC also decreased variation across clinics
- Challenges:
  - Human resource constraints
  - Expansion of PITC to other categories of clinic patients



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Sexual & Reproductive Health and HIV

# LINKAGES: EVIDENCE REVIEW AND RECOMMENDATIONS

2009



# SRH/HIV Linkages

- 58 studies reviewed
  - 34: Integration of HIV services into existing SRH programs
  - 14: Integration of SRH services into existing HIV programs
  - 10: Integration of HIV and SRH services concurrently



# SRH/HIV Linkages

- Settings:
  - Antenatal Care Clinics adding HIV services
  - HIV Counseling & Testing Services adding SRH services
  - Family Planning Clinics adding HIV Services
  - HIV Clinics adding SRH services
  - STI Clinics adding HIV services
  - Primary Health Clinics adding HIV and/or SRH services



# SRH/HIV Linkages

- Many of the studies reported increases in:
  - Access to and uptake of services, including HIV testing and PMTCT cascade
  - Health and behavioral outcomes
  - Condom use
  - HIV and STI knowledge
  - Overall quality of service



# SRH/HIV Linkages

- Few or no studies addressed
  - Linked services targeting men and boys
  - Gender-base violence prevention
  - Stigma and discrimination
  - Comprehensive SRH services for PLHIV
    - Family planning, addressing unintended pregnancies



# Integration Models for HIV Services: Latin America

- Primary Health Services
  - Appropriate for low prevalence and/or concentrated epidemic?
- Tuberculosis centers
  - What direction of linkage is needed?
- IDU treatment centers
  - Policy changes needed?
- Referral centers and tertiary care hospitals
  - Center of excellence model?
- PITC for Sexually Transmitted Infection Clinics
  - Human resources issue?
- MCH-PMTCT
  - Add SRH services to HIV or add HIV services to SRH?



# Goals of Integration

- Increase coverage?
- Improve quality?
- Sustainability?
- Health System Strengthening?
- Generate efficiency?
- Stigma reduction?



# Thank you!

- Molly Rivadeneira, CDC
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